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Body and Canard Effects on an Attached-Flow Maneuver Wing at Mach 1.62

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an Attached-Flow Maneuver
Wing at Mach 1.62**

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National Aeronautics
and Space Administration

Scientific and Technical
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INTRODUCTION

An attached-flow maneuver-wing concept for supersonic speeds has been developed, experimentally verified, and reported in references 1, 2, and 3. This maneuver-wing concept focuses on the flow in the crossplane which is normal to the longitudinal axis. As pointed out by Jones in reference 4, the crossflow velocity field plays the dominant role in establishing the flow-field characteristics of highly swept wings. For maneuvering conditions, the crossflow velocity field on the wing upper surface forms into subsonic and supersonic regions which are highly nonlinear flows. Consequently, the methods used to analyze and/or design for mixed crossflow regions must properly account for these nonlinearities. (For example, see ref. 5.)

The attached-flow maneuver-wing concept for supersonic high-lift conditions applies camber and thickness to control the upper-surface crossflow. Specifically, the upper-surface crossflow is expanded around the wing leading edge to supercritical conditions and then is compressed isentropically to subcritical-crossflow conditions. Shockless, attached flow is maintained over the entire wing surface to minimize drag. To prove the concept, an isolated conical wing (frequently referred to herein as wing alone) was designed to achieve a spanwise section lift coefficient of 0.457 at a Mach number M of 1.62 and at an angle of attack α of 10° . An experimental program (ref. 2) was conducted on the isolated conical wing and the design goals were realized. The further development of the attached-flow maneuver-wing concept for supersonic high-lift conditions focused on body and canard effects on the conical wing of reference 2 and on the nonconical isolated wing of reference 3.

The purpose of this paper is to report the results of the experimental test program which addressed the effects of a body and canards on the performance of the isolated conical wing. The conical-wing model was modified to accept a cone-cylinder body and canards. The canards had 10° of dihedral and were located above the wing plane. The cambered wing-body configuration was tested with two different forebody shapes, and the cambered wing-body-canard configuration was tested with three canard incidence angles. This same test matrix, but without one forebody shape, was repeated for an uncambered (flat) wing which had the same planform and essentially the same thickness distribution as the cambered wing. Longitudinal force and moment data and static-pressure data were obtained in the Langley Unitary Plan Wind Tunnel (ref. 6) at a Mach number of 1.62 and a Reynolds number of 2.0×10^6 per foot. The angle of attack ranged from -2° to 12° , but most of the cambered-wing data were taken between 8° and 12° , inclusive, and most of the uncambered-wing data were taken between 2° and 9° , inclusive. Photographs of oil-flow patterns on the upper surface for the canard-on and canard-off configurations were obtained at $\alpha \approx 10^\circ$ for the cambered-wing models and at $\alpha \approx 6^\circ$ for the uncambered-wing models.

SYMBOLS

The moment reference point is 22.88 in. behind the apex of the body on the centerline and 0.75 in. below the model reference line. Symbols in parentheses are used in the appendix tables.

	(CA)	axial-force coefficient with wing-base and body-cavity axial force removed, $\frac{\text{Axial force}}{q_{\infty} S}$
	(CAB)	axial-force coefficient of wing base, outboard of 21-percent semispan
	(CAC)	axial-force coefficient of body cavity, inboard of 21-percent semispan
C_D	(CD)	drag coefficient with wing base and body cavity drag removed, $\frac{\text{Drag}}{q_{\infty} S}$
	(CDB)	drag coefficient of wing base, outboard of 21-percent semispan
	(CDC)	drag coefficient of body cavity, inboard of 21-percent semispan
$C_{D,o}$		drag coefficient at zero lift for uncambered wing
ΔC_D		incremental drag-due-to-lift coefficient, $C_D - C_{D,o}$
$\frac{\Delta C_D}{\beta C_L^2}$		linear-theory lifting-performance parameter
C_L	(CL)	lift coefficient, $\frac{\text{Lift}}{q_{\infty} S}$
C_m	(CM)	pitching-moment coefficient, $\frac{\text{Pitching moment}}{q_{\infty} S l}$
	(CN)	normal-force coefficient, $\frac{\text{Normal force}}{q_{\infty} S}$
C_p	(CP)	local pressure coefficient, $\frac{p - p_{\infty}}{q_{\infty}}$
	(HO)	free-stream stagnation pressure
L/D		lift-drag ratio
l		model reference length (wing centerline chord length), 24 in.
M	(MACH)	free-stream Mach number

p		local static pressure
P_∞	(P)	free-stream static pressure
q_∞	(Q)	free-stream dynamic pressure
R	(RE/FT.)	free-stream Reynolds number per foot
	(RE/M)	free-stream Reynolds number per meter (see appendix C)
r		body radius
S		reference wing area, 2.285 ft ²
t/c		thickness-to-chord ratio
x	(X)	longitudinal distance measured from wing apex, in.
y	(Y)	spanwise distance measured from model centerline, in.
z	(Z)	vertical distance measured from model reference plane, in.
α	(ALPHA)	angle of attack, deg
β		$= \sqrt{M^2 - 1}$
	(BETA)	sideslip angle (used in appendix A), deg
δ_c		canard incidence angle, deg; positive with trailing edge down
η	(ETA)	conical coordinate, $\frac{y}{y_{LE}}$
Λ		leading-edge sweep angle, deg

Subscript:

LE leading edge

Abbreviations:

L.E. leading edge

PT point

T.E. trailing edge

WIND-TUNNEL MODELS

The cambered-wing model is a clipped delta ($\Lambda = 57^\circ$) with approximately the first 60 percent of the wing having a conical geometry, which produced an attached supercritical expansion and shockless recompression on the upper surface at the design point of $\alpha = 10^\circ$ and $M = 1.62$. The conical-flow, nonlinear potential method of reference 5 was used to design the cambered wing, and the details of this

design are presented in appendix A of reference 2. Briefly, the design procedure consisted of initially examining pressure distributions and lifting forces produced by a parametric variation of wing thickness, camber, and angle of attack. From this parametric study, a geometry was selected which produced the desired spanwise section lift coefficient of approximately 0.480 at an angle of attack of 10° and a Mach number of 1.62; however, a weak crossflow shock remained on the upper surface. At this point in the design procedure, smooth upper-surface geometry changes were made in the vicinity of the crossflow shock until the shock was totally eliminated. The design section lift coefficient was 0.457. A smooth surface fairing was made from the conical geometry to a constant-thickness geometry, and the wing tip was truncated to keep wing area and span within tunnel test-section limits. The resulting thick trailing edge was recessed.

The flat wing employed the same planform and essentially the same thickness distribution as that of the cambered wing, and it was tested to obtain a comparison set of pressure data containing crossflow shocks and baseline force and moment results.

Figure 1 shows the model layout of the wing-body-canard configuration. Figure 2 shows the spanwise section shapes for the conical portion of the flat wing and cambered wing, and the ordinates for these conical spanwise sections are presented in tables I and II, respectively. In order to verify geometric accuracy prior to testing, both wings were inspected with a numerical-recording measuring machine. The models were within 0.004 in. of the design surface shape over the first 10 percent of the local wing chord.

An axisymmetric body was designed to fit the previously tested wing-alone models. A constant radius of 2.5 in. was selected for the cylindrical portion of the body. The basic forebody nose (nose 1) was a 20° cone blending to a 4° frustrum, to provide a canard mounting surface, and finally fairing into the constant-radius cylinder. To obtain additional forebody effects, a second forebody nose (nose 2) was designed with an increased radius. The longitudinal radius distributions for each of these two forebodies are shown in figure 3 and the ordinates are contained in table III.

Canards were tested only on the first forebody (nose 1) and were mounted as shown in figure 1. The leading-edge sweep angle is 57° and the dihedral angle is 10° . The canard airfoil has a biconvex section that is 5 percent thick. The canard has a linear twist distribution that resulted in a 2.5° washout at the tip. The canard incidence angles were 0° , -5° , and -10° , relative to the wing reference plane. The detailed layout of the canard is shown in figure 4.

Photographs of the cambered wing-body-canard model are shown in figures 5(a) and (b). A photograph of the cambered wing-alone model (ref. 2) is shown in figure 5(c) for comparison. Note that for the wing-alone test, the balance housing is confined to the lower surface.

INSTRUMENTATION

Both the cambered and the uncambered wings had 79 pressure taps in the isolated-wing test. (See ref. 2.) However, the addition of the body for the present study covered 8 of the original 79 pressure taps. Therefore, each wing in the present test was instrumented with 71 pressure taps located as shown in figure 6, and the corresponding coordinates are presented in table IV. For ease of installation, the upper-

surface orifices were located on the left side of the model, and the lower-surface orifices were located on the right side of the model. The first two rows at $x/l = 0.450$ and 0.550 were located in the conical-geometry region of the wing. The row at 0.450 was originally used for checking the conicity of the flow in the wing-alone test. The rows of orifices at values of x/l greater than 0.6 were included to obtain nonconical pressure data. To determine wing base drag, four taps were located in the recessed base of the wing. The body-cavity static pressure was measured with pressure tubes located inside the model in the vicinity of the balance.

Aerodynamic forces and moments were measured by a six-component strain-gage balance that was housed within the model. The balance was attached to a sting which, in turn, was rigidly fastened to the model support system of the tunnel. Angle of attack was measured with an accelerometer located in the model support system.

TEST INFORMATION

The tests were conducted in the low Mach number test section of the Langley Unitary Plan Wind Tunnel, which is a variable Mach number, variable-pressure, continuous-flow tunnel. The test section is approximately 4 ft square. (See ref. 6 for a more-detailed description of this facility.)

Tests were conducted at $M = 1.62$, a Reynolds number of 2.0×10^6 per foot, a stagnation temperature of 125°F , and a stagnation pressure of 7.5 psia. Angle of attack ranged from approximately -2° to 12° , but most of the cambered-wing data were taken between 8° and 12° , inclusive, and most of the flat-wing data were taken between 2° and 9° , inclusive. The measured angle of attack was corrected for tunnel-flow angularity and for the deflection of the balance and sting under load. Flow-angle corrections were determined for both the cambered-wing configurations and the flat-wing configurations from upright and inverted runs of the flat wing-body-canard model with $\delta_c = 0^\circ$.

Transition strips, about 0.125 in. wide and composed of No. 60 carborundum grit, were placed on the wing on both the upper and lower surfaces along a ray through the wing apex such that at an x/l station of 0.550 (the main row of pressure taps), the leading edge of the strip would be 0.4 in. back from the center of the leading edge along the streamwise arc. Transition strips, 0.125 in. wide, were also placed around the nose of the body at a distance 1.2 in. back from the apex and over the entire canard span at a constant 0.4 in. behind the leading edge.

Pressure data were obtained from two internally mounted, 48-port scanning valves. Force data were obtained simultaneously. The force data presented herein have been adjusted to free-stream static pressures acting on both the body-cavity and the wing-base areas. After all the pressure results were obtained, oil-flow photographs were taken by using fluorescent oil under ultraviolet illumination.

RESULTS AND DISCUSSION

All the pressure-coefficient data are tabulated in appendix A. The pressure-coefficient data presented in figures 7 to 18 for analysis are from only the spanwise row of pressure taps located at $x/l = 0.55$. The longitudinal force and moment data are tabulated in appendix B. Appendix C contains a tabulation of the longitudinal force and moment data for the wing-alone test reported in reference 2.

Pressure Data

The pressure-coefficient data for the cambered wing-body model (nose 1) at several angles of attack are plotted in the spanwise direction in figure 7. The pressure-coefficient data for the cambered wing-body-canard model (nose 1) at several angles of attack are shown in figure 8 for the three canard incidence angles. The trends for both configurations are that the compression pressures increase with increasing angle of attack and that the expansion pressures decrease with increasing angle of attack, as expected. A comparison of the influence of the two different forebodies on the wing pressure distribution is shown in figure 9 for three angles of attack. The effects of the two different forebodies are nearly identical; therefore, nose 2 was not tested on the flat wing.

Cambered-wing pressures for wing-alone (ref. 2) and wing-body configurations are shown in figure 10 for three angles of attack. The presence of the body lowers the wing pressure on both the upper and lower surfaces, since the wing is located in the expanded flow field aft of the cone-cylinder intersection. The larger pressure shift on the lower surface of the wing is due to the wing-alone balance housing (ref. 2), which produced an additional compression on the wing lower-surface flow field in the wing-alone test. Computational studies using the method of reference 5 indicate that the presence of the balance housing for the wing-alone tests is responsible for about one-half of the difference in the lower-surface pressures seen in figure 10. It is important to note that although the upper-surface pressures expand to more negative values because of the presence of the body, the basic supercritical-crossflow pattern obtained for the wing alone is not altered.

Pressures for the cambered wing-body model with the canard on and canard off are shown in figure 11. The canard does not influence the wing lower-surface pressures, but an influence is noted on the upper-surface pressures. The upwash field outboard of the canard tip increases the local wing angles of attack in that region, thus resulting in a greater expansion around the wing upper-surface leading edge. Conversely, the downwash field inboard of the canard tip decreases the local wing angle of attack in that region, thus resulting in higher pressures on the upper surface. The transition from the canard upwash field to the canard downwash field is distinct and becomes more pronounced with increasing angle of attack and also moves inboard with increasing angle of attack. Note that this transition occurs well outboard of the canard tip which is at $\eta = 0.617$.

The effect of canard incidence angle is shown in figure 12. Changing the incidence angle on the canard from 0° to -10° effectively unloads that lifting surface with a resultant decrease in the strength of the recompression as the wing expansion field "transitions" from the canard upwash region to the canard downwash region. As the canard is unloaded, the strength of the tip vortex decreases and the transition region moves inboard toward the canard tip.

The pressure-coefficient data are summarized in figure 13 for the flat wing-body model and in figure 14 for the flat wing-body-canard model for the three canard incidence angles. The trends of the pressure data with increasing angle of attack are as expected, although the upper-surface pressure distributions are very different from those seen on the cambered-wing configurations. At all but the lowest angles of attack, the flat-wing upper-surface pressure distribution shows a leading-edge pressure spike, which was not on the cambered wing, and a relatively strong crossflow shock.

Flat-wing pressures for wing-alone and wing-body configurations are shown in figure 15. As was noted in comparisons for the cambered wing and cambered wing-body model, the presence of the large cone-cylinder body results in decreased pressures on the flat wing.

Flat-wing pressures for wing-body and wing-body-canard configurations are shown in figure 16 for three angles of attack. The main effect of the canard is to shift the crossflow shock to a slightly more outboard location.

The influence of the canard incidence angle on the flat-wing pressures is shown in figure 17 for three angles of attack. Again, this effect is primarily on the wing upper-surface pressures, although at $\alpha = 2^\circ$ and $\delta = -10^\circ$, the wing lower-surface pressures are uniformly increased across a major portion of the wing span. At this low angle of attack, deflecting the canard leading edge downward loads the canard with negative lift. Overall, the canard-incidence-angle effect is not as orderly for the flat-wing case as was noted on the cambered-wing case; but, in general, changing the canard incidence angle from 0° to -10° moves the crossflow shock inboard.

A comparison of experimental pressure data and linear-theory pressure estimates from the modified Woodward method described in reference 7 is presented in figure 18. Cambered wing-body comparisons are made at $\alpha = 10^\circ$ for both the canard-off and canard-on cases. The linear theory underestimates the lower-surface compression pressure level across most of the wing span. The estimated upper-surface pressure levels are more accurate on the inboard portion of the wing where the crossflow is subcritical. Outboard of about 85 percent of the local wing span, the linear-theory pressures expand toward infinity and result in large errors. The calculated effect of the canard on the wing pressures is to alter both the upper- and lower-surface pressures, which is not shown by the experimental data. Also, the calculated results do not show the canard-on and canard-off pressures crossing outboard of the canard tip, as is seen in the experimental data.

The flat wing-body data in figure 18(b) at $\alpha \approx 6^\circ$ also show the canard off and canard on. The linear theory provides a better overall pressure distribution for the flat-wing case, although the influence of the leading-edge singularity is still apparent, as expected. Again, the calculated canard effect is a downwash which increases upper-surface pressures and decreases lower-surface pressures across the entire span.

Force and Moment Data

Lift and pitching-moment data for wing-alone (ref. 2), wing-body, and wing-body-canard configurations are shown in figure 19. The addition of the cone-cylinder body causes the lift and pitching moment to decrease and the curves to remain linear except for a gradual decrease in the lift-curve slope for the flat wing-body configuration for $\alpha > 7^\circ$. See (fig. 19(b).) The effect of adding a canard is to increase the lift, the pitching moment, and the pitching-moment-curve slope, although the addition of a canard does not influence the wing-body lift-curve slope except for the flat wing-body lift curve in its nonlinear range.

The effect of canard incidence angle on the lift and pitching-moment data is shown in figure 20. As the canard incidence angle is changed from 0° to -10° , both the lift and pitching moment decrease, although the slopes of the curves are not altered.

The drag polars for the configurations of this test program along with the polars for the two wing-alone models tested previously (ref. 2) are displayed in figure 21. The body creates a large drag increment, whereas the canard effects are, of course, much smaller and actually beneficial for the cambered wing-body model above $C_L = 0.3$. For the flat wing-body configuration, the canard drag increment is always positive, although the drag penalty dissipates at the higher lift coefficients. Figure 21(c) is presented to illustrate the drag benefit of camber at typical supersonic-maneuver lift coefficients. At $C_L = 0.4$, the cambered wing-body model produces 5 percent less drag than the flat wing-body model of the same volume.

The performance of the camber surface is quantified in figure 22 by using the drag-due-to-lift parameter $\Delta C_D / \beta C_L^2$. This parameter illustrates the beneficial effects of camber on the lifting performance of a wing. Note that the cambered-wing configurations are superior to the corresponding flat-wing configurations, except for the wing-alone case for $C_L < 0.3$. The addition of the body creates a performance decrement, in general, but the addition of the canard restores a part of the wing-alone performance, especially for the cambered wing where the canard actually generates a performance increment relative to the cambered wing-alone case for $C_L < 0.35$.

Linearized-theory estimates (ref. 7) of the lift and pitching moment of the wing-body and wing-body-canard configurations are presented in figure 23. These integrated results correspond to the pressure estimates which were shown in figure 18. Linear theory underestimates the lift and pitching moment for both wing-body configurations. Also, the slopes of these curves are less for the theory than for the experimental data. These errors are largely due to the well-known linear-theory characteristic of underestimating compression pressures, an error which grows with increasing angle of attack. The calculated canard effect shows the proper trend but not the correct increment. The linear-theory lift increment due to the canard is somewhat smaller than that shown by the experiment, whereas the calculated pitching-moment increment is much larger. Both of these errors are due to the linear-theory procedure for calculating canard influences on this wing. As shown in figure 18, the calculated canard influence is a downwash over a major portion of the wing, on both the upper and lower surfaces. The canard downwash reduces the local angles of attack of each linear-theory panel, thereby reducing the lift production of the wing. Since a large portion of the wing falls behind the pitch center, the additional calculated lift increment due to the canard is exaggerated by the erroneously calculated loss in wing lift due to the presence of the canard. The net result of the linear-theory calculation of canard influence for this configuration is the underestimation of the canard-lift increment and the overestimation of the canard-pitch increment.

Oil-Flow Results

Photographs of the upper-surface oil flow are presented in figure 24. The cambered-wing data, with and without the canard, are for the design angle of attack of approximately 10° ; and the flat-wing data, with and without the canard, are for the design angle of attack of approximately 6° . The C_L values for the flat-wing cases are about 20 to 25 percent below those of the corresponding cambered wing.

The cambered-wing photographs show smooth wing flow patterns for both the canard off and canard on. In figure 24(a), the oil-accumulation line, which starts near the wing leading-edge body juncture and extends a short distance aft along a conical ray, could indicate the presence of a crossflow shock. Farther out along the span the oil-accumulation line disappears. The canard (fig. 24(b)) does not seem to exert a strong influence on the cambered-wing oil-flow pattern. In particular, the recom-

pression (fig. 11) which indicated the transition from the canard upwash region to the canard downwash region was not apparent in the oil-flow pattern. Note the separated-flow region on the canard tips.

The flat-wing configurations (figs. 24(c) and (d)) both show a strong crossflow shock, even though the lift coefficient is much less than that in the cambered-wing cases previously discussed. In figure 24(c), the crossflow shock begins just aft of the wing leading-edge body juncture and moves aft along a nearly conical ray for about 60 percent of the wing length. This is the portion of the wing which has a conical geometry. Aft of the conical portion of the wing, the crossflow shock diffuses. The location of the outboard oil-accumulation line was measured from the photograph and found to correspond to the beginning of the recompression or crossflow-shock region as defined by the pressure data. Just aft of the heavy outboard line, numerous oil-accumulation lines form into a "scalloped" pattern which may indicate areas of local flow separation. The pressure data at $x/l = 0.55$ (fig. 13) do not provide a clear indication of local shock-induced flow separation.

The canard-on photograph (fig. 24(d)) does show a definite canard influence on the flat wing. The wing crossflow shock directly aft of the canard is reduced in strength as shown by the much lighter oil-accumulation line directly behind the canard. Also, that portion of the wing crossflow shock which falls outboard of the canard tip appears to be somewhat more diffused than that for the corresponding canard-off case. Again, the outermost oil-accumulation line was measured and its location was found to indicate the beginning of the crossflow shock region which occurs more outboard than that for the canard-off case.

The presence of the crossflow shock on the flat wing cases is a probable source of the nonlinearity of the flat wing-body lift curve. As angle of attack is increased, the strength of the crossflow shock increases and the likelihood of local shock-induced separation increases. The effect of shock-induced separation on the upper surface would be a loss in lift.

CONCLUDING REMARKS

A test was conducted at Mach 1.62 to evaluate the effects of a cone-cylinder forebody and canards, which were mounted above the wing plane, on a conical wing designed to have controlled supercritical crossflow at the high-lift conditions required for maneuver. The results indicated that although the wing-design procedure did not include the effects of a forebody and/or canards, the supercritical crossflow and shockless recompression features were maintained in the presence of the forebody and the canards produced the expected upwash and downwash effects without changing the basic flow pattern of the isolated wing.

For reference, the same cone-cylinder forebody and canards were tested on an uncambered (flat) version of the conical wing with nearly equivalent volume. The flat-wing flow field was characterized by a strong crossflow shock at high-lift conditions. However, the body affected the flat-wing pressures in the same manner as it affected the cambered-wing pressures; that is, a uniform decrease resulted in the wing pressure field. The canard influence was to shift the flat-wing pressure field without changing the basic flow pattern.

The test of the cambered-wing configurations and the flat-wing configurations allowed a direct comparison of the benefits of camber. Both the drag polar and the

linear-theory lifting-performance parameter showed the drag reduction due to wing camber at high lift coefficients.

A comparison of experimental data with linear-theory calculations indicated that the lift and pitching-moment estimates for both the cambered-wing and flat-wing configurations were conservative, in large measure, because of the underestimation of compression pressures. The character of the mixed upper-surface crossflow was, of course, not shown by the linear-theory estimates, and also the error due to the linear-theory leading-edge singularity was noted. The calculated canard influence was a downwash over a major portion of both the upper and lower wing surfaces. However, the experimental data showed that the canards produced distinct upwash and downwash effects which were almost totally confined to the wing upper surface. The net calculated effect of the canard was an underestimation of the canard lift increment and a large overestimation of the canard pitch increment.

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TABLE I.- FLAT-WING SPANWISE SECTION ORDINATES

η	z/y_{LE}	η	z/y_{LE}
1.000000	0.000000	0.876460	0.027420
.999970	.001840	.868670	.027800
.999710	.003830	.860660	.028140
.999200	.005390	.852430	.028450
.998440	.006740	.843990	.028720
.997430	.007960	.835330	.028960
.996160	.009100	.826450	.029160
.994630	.010160	.817370	.029310
.992860	.011170	.808080	.029450
.990830	.012140	.798580	.029550
.988550	.013060	.788880	.029630
.986010	.013950	.778980	.029670
.983230	.014800	.768890	.029700
.980200	.015630	.758590	.029710
.976920	.016430	.748100	.029710
.973380	.017210	.737430	.029710
.969610	.017970	.726560	.029710
.965580	.018700	.715510	.029710
.961310	.019420	.704280	.029730
.956800	.020110	.692870	.029770
.952040	.020790	.681290	.029840
.947040	.021450	.669530	.029930
.941800	.022100	.657600	.030080
.936320	.022730	.645500	.030260
.930600	.023350	.633240	.030490
.924640	.023940	.620810	.030780
.918450	.024510	.608240	.031130
.912030	.025070	.595500	.031520
.905370	.025600	.582610	.031970
.898480	.026100	.569580	.032460
.891370	.026570	.556400	.032980
.884030	.027010	.543080	.033550
.529620	.034130	.267790	.042350
.516030	.034750	.252400	.042220
.502300	.035390	.236930	.042020
.488450	.036050	.221410	.041820
.474470	.036720	.205830	.041600
.460370	.037400	.190200	.041400
.446160	.038080	.174520	.041210
.431830	.038740	.158800	.041030
.417390	.039370	.143030	.040870
.402850	.039980	.127230	.040730
.388200	.040530	.111400	.040610
.373460	.041030	.095540	.040520
.358620	.041470	.079650	.040440
.343690	.041820	.063750	.040390
.328670	.042100	.047820	.040350
.313560	.042290	.031890	.040330
.298380	.042390	.015950	.040320
.283120	.042410	.000000	.040320

TABLE II.- CAMBERED-WING SPANWISE SECTION ORDINATES

(a) Upper surface

η	z/y_{LE}	η	z/y_{LE}
1.000000	-0.207000	0.877440	-0.131880
.999790	-.205420	.869510	-.128340
.999260	-.203850	.861360	-.124750
.998450	-.202250	.852990	-.121100
.997350	-.200600	.844390	-.117400
.995980	-.198890	.835560	-.113650
.994330	-.197110	.826520	-.109850
.992410	-.195260	.817260	-.105990
.990230	-.193340	.807790	-.102090
.987770	-.191330	.798100	-.098150
.985060	-.189250	.788210	-.094160
.982070	-.187080	.778100	-.090130
.978830	-.184830	.767800	-.086060
.975330	-.182510	.757290	-.081970
.971570	-.180100	.746580	-.077850
.967550	-.177610	.735680	-.073700
.963280	-.175040	.724580	-.069540
.958750	-.172400	.713300	-.065370
.953970	-.169680	.701830	-.061200
.948940	-.166890	.690170	-.057040
.943660	-.164020	.678330	-.052880
.938130	-.161090	.666310	-.048750
.932350	-.158080	.654120	-.044650
.926320	-.155020	.641760	-.040590
.920060	-.151890	.629230	-.036570
.913550	-.148700	.616540	-.032620
.906800	-.145450	.603680	-.028730
.899810	-.142140	.590670	-.024910
.892590	-.138780	.577500	-.021190
.885130	-.135350	.564180	-.017560
.550710	-.014030	.271780	.030120
.537100	-.010610	.256160	.031290
.523350	-.007300	.240470	.032370
.509460	-.004130	.224720	.033370
.495440	-.001080	.208910	.034280
.481290	.001850	.193040	.035110
.467020	.004670	.177130	.035880
.452620	.007360	.161170	.036580
.438110	.009930	.145170	.037220
.423480	.012370	.129140	.037800
.408740	.014690	.113070	.038330
.393890	.016880	.096970	.038800
.378940	.018950	.080850	.039210
.363900	.020890	.064700	.039570
.348760	.022720	.048540	.039860
.333530	.024420	.032370	.040080
.318210	.026010	.016190	.040220
.302810	.027490	.000000	.040270
.287330	.028860		

TABLE II.- Concluded

(b) Lower surface

η	z/y_{LE}	η	z/y_{LE}
1.000000	-0.207000	0.880440	-0.191280
.999880	-.208640	.873010	-.188710
.999320	-.210560	.865350	-.186020
.998610	-.212260	.857490	-.183210
.997830	-.213930	.849410	-.180270
.996770	-.215630	.841130	-.177210
.995630	-.216820	.832640	-.174020
.994320	-.217720	.823940	-.170720
.992810	-.218390	.815040	-.167300
.991090	-.218860	.805940	-.163760
.989140	-.219160	.796650	-.160120
.986970	-.219310	.787150	-.156390
.984560	-.219300	.777470	-.152570
.981930	-.219140	.767590	-.148670
.979060	-.218850	.757530	-.144710
.975950	-.218430	.747270	-.140700
.972610	-.217880	.736840	-.136660
.969040	-.217200	.726220	-.132600
.965220	-.216400	.715420	-.128540
.961180	-.215480	.704450	-.124510
.956900	-.214440	.693310	-.120510
.952390	-.213300	.681990	-.116570
.947650	-.212050	.670510	-.112700
.942670	-.210690	.658860	-.108930
.937470	-.209220	.647050	-.105280
.932030	-.207660	.635080	-.101760
.926370	-.205990	.622950	-.098390
.920480	-.204220	.610670	-.095190
.914360	-.202340	.598240	-.092160
.908020	-.200360	.585660	-.089290
.901450	-.198260	.572930	-.086580
.894670	-.196050	.560070	-.084040
.887670	-.193730	.547070	-.081670
.880330	-.191300	.533930	-.079460
.872660	-.188760	.520660	-.077410
.864660	-.186020	.507260	-.075530
.856330	-.183210	.493740	-.073800
.847660	-.180270	.480090	-.072210
.838660	-.177210	.466330	-.070750
.829330	-.174020	.452450	-.069400
.819660	-.170720	.438450	-.068160
.809660	-.167300	.424350	-.066990
.800330	-.163760	.410140	-.065890
.790660	-.160120	.395840	-.064820
.780660	-.156390	.381430	-.063780
.770330	-.152570	.366930	-.062730
.760660	-.148670	.352330	-.061670
.750660	-.144710	.337660	-.060560
.740330	-.140700	.322890	-.059410
.730660	-.136660	.308050	-.058200
.720660	-.132600	.293120	-.056920
.710330	-.128540	.278130	-.055580
.700660	-.124510		
.690660	-.120510		
.680330	-.116570		
.670660	-.112700		
.660330	-.108930		
.650660	-.105280		
.640330	-.101760		
.630660	-.098390		
.620330	-.095190		
.610660	-.092160		
.600330	-.089290		
.590660	-.086580		
.580330	-.084040		
.570660	-.081670		
.560330	-.079460		
.550660	-.077410		
.540330	-.075530		
.530660	-.073800		
.520330	-.072210		
.510660	-.070750		
.500330	-.069400		
.490660	-.068160		
.480330	-.066990		
.470660	-.065890		
.460330	-.064820		
.450660	-.063780		
.440330	-.062730		
.430660	-.061670		
.420330	-.060560		
.410660	-.059410		
.400330	-.058200		
.390660	-.056920		
.380330	-.055580		
.370660			
.360330			
.350660			
.340330			
.330660			
.320330			
.310660			
.300330			
.290660			
.280330			
.270660			
.260330			
.250660			
.240330			
.230660			
.220330			
.210660			
.200330			
.190660			
.180330			
.170660			
.160330			
.150660			
.140330			
.130660			
.120330			
.110660			
.100330			
.090660			
.080330			
.070660			
.060330			
.050660			
.040330			
.030660			
.020330			
.010660			
.000330			

TABLE III.- BODY ORDINATES

[Body-station reference selected to correspond to coordinate system of wing-alone test]

(a) Nose 1

(b) Nose 2

x, in.	r, in.	x, in.	r, in.
-8.000	0	-8.000	0
-2.650	^a 1.947	-.850	^a 2.602
-2.600	1.965	-.800	2.620
-2.550	1.982	-.750	2.637
-2.500	1.999	-.700	2.652
-2.450	2.015	-.650	2.666
-2.400	2.030	-.600	2.678
-2.350	2.044	-.550	2.689
-2.300	2.058	-.500	2.698
-2.250	2.071	-.450	2.706
-2.200	2.083	-.400	2.712
-2.150	2.095	-.350	2.717
-2.100	2.106	-.300	2.721
-2.050	2.116	-.250	2.723
-2.000	2.125	-.200	2.724
-1.950	2.133	-.150	2.723
-1.900	2.141	-.100	2.721
-1.850	2.148	-.050	2.718
-1.800	2.155	2.550	^a 2.536
-1.600	2.173	2.700	2.526
2.550	^a 2.463	2.750	2.523
2.600	2.467	2.800	2.520
2.650	2.470	2.850	2.518
2.700	2.473	2.900	2.515
2.750	2.476	2.950	2.513
2.800	2.479	3.000	2.511
2.850	2.481	3.050	2.509
2.900	2.484	3.100	2.507
2.950	2.486	3.150	2.506
3.000	2.488	3.200	2.504
3.050	2.490	3.250	2.503
3.100	2.492	3.300	2.502
3.150	2.493	3.350	2.501
3.200	2.495	3.400	2.501
3.250	2.496	3.450	2.501
3.300	2.497	3.500	2.500
3.400	2.498	3.550	2.500
3.500	2.500	3.600	2.500
.	.	.	.
.	.	.	.
.	.	.	.
24.000	2.500	24.000	2.500

^aStraight contour between these locations.

TABLE IV.- PRESSURE-ORIFICE LOCATIONS

Model orifice	x, in.	y, in.	η
Upper surface			
1	10.8	7.013	1.000
2	↓	6.908	.985
3	↓	6.803	.970
4	↓	6.452	.925
5	↓	6.031	.860
6	↓	5.049	.720
7	↓	4.769	.680
8	↓	4.348	.620
9	↓	3.787	.540
(a)	(a)	(a)	(a)
11	13.2	8.752	1.000
12	↓	8.529	.995
13	↓	8.443	.985
14	↓	8.315	.970
15	↓	8.143	.950
16	↓	7.929	.925
17	↓	7.715	.900
18	↓	7.372	.860
19	↓	7.029	.820
20	↓	6.686	.780
21	↓	6.343	.740
22	↓	6.172	.720
23	↓	6.000	.700
24	↓	5.829	.680
25	↓	5.658	.660
26	↓	5.143	.620
27	↓	4.972	.580
28	↓	4.629	.540
29	↓	3.943	.460
30	↓	3.429	.400
(a)	(a)	(a)	(a)
↓	↓	↓	↓
36	15.0	9.740	1.000
37	↓	8.377	.860
38	↓	7.014	.720
39	↓	6.039	.620
40	↓	5.260	.540
41	16.2	10.52	1.000
42	17.4	11.30	1.000
43	17.4	9.718	.860

Model orifice	x, in.	y, in.	η
Upper surface			
44	17.4	8.136	0.720
45	17.4	7.006	.620
46	17.4	6.102	.540
47	19.8	9.258	.720
48	19.8	7.972	.620
49	19.8	6.943	.540
50	(b)	(b)	1
51	↓	↓	2
52	↓	↓	3
53	↓	↓	4
Lower surface			
54	10.8	6.908	0.985
55	↓	6.452	.925
56	↓	4.909	.700
57	↓	2.805	.400
(a)	(a)	(a)	(a)
59	13.2	8.572	1.000
60	↓	8.529	.995
61	↓	8.443	.985
62	↓	8.315	.970
63	↓	8.143	.950
64	↓	7.929	.925
65	↓	7.715	.900
66	↓	7.372	.860
67	↓	6.686	.780
68	↓	6.000	.700
69	↓	5.143	.620
70	↓	4.629	.540
71	↓	3.429	.400
(a)	(a)	(a)	(a)
73	17.4	9.718	.860
74	↓	8.136	.720
75	↓	7.006	.620
76	↓	6.102	.540
77	19.8	9.258	.720
78	19.8	7.972	.620
79	19.8	6.943	.540

^aOrifice locations eliminated because of addition of body to wing-alone models.

^bBase pressure.

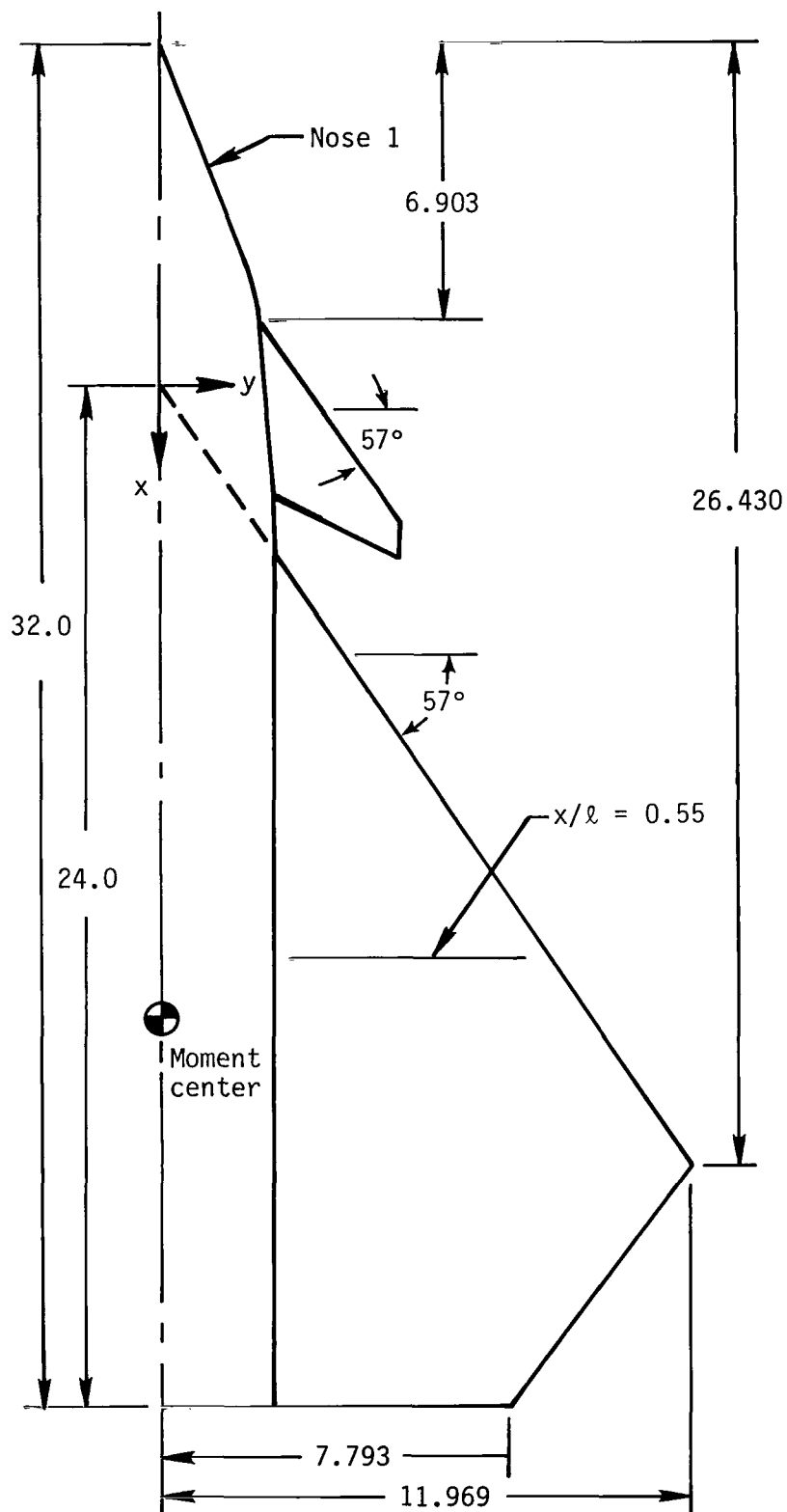


Figure 1.- Model layout of wing-body-canard configuration.
All dimensions are given in inches unless otherwise specified.

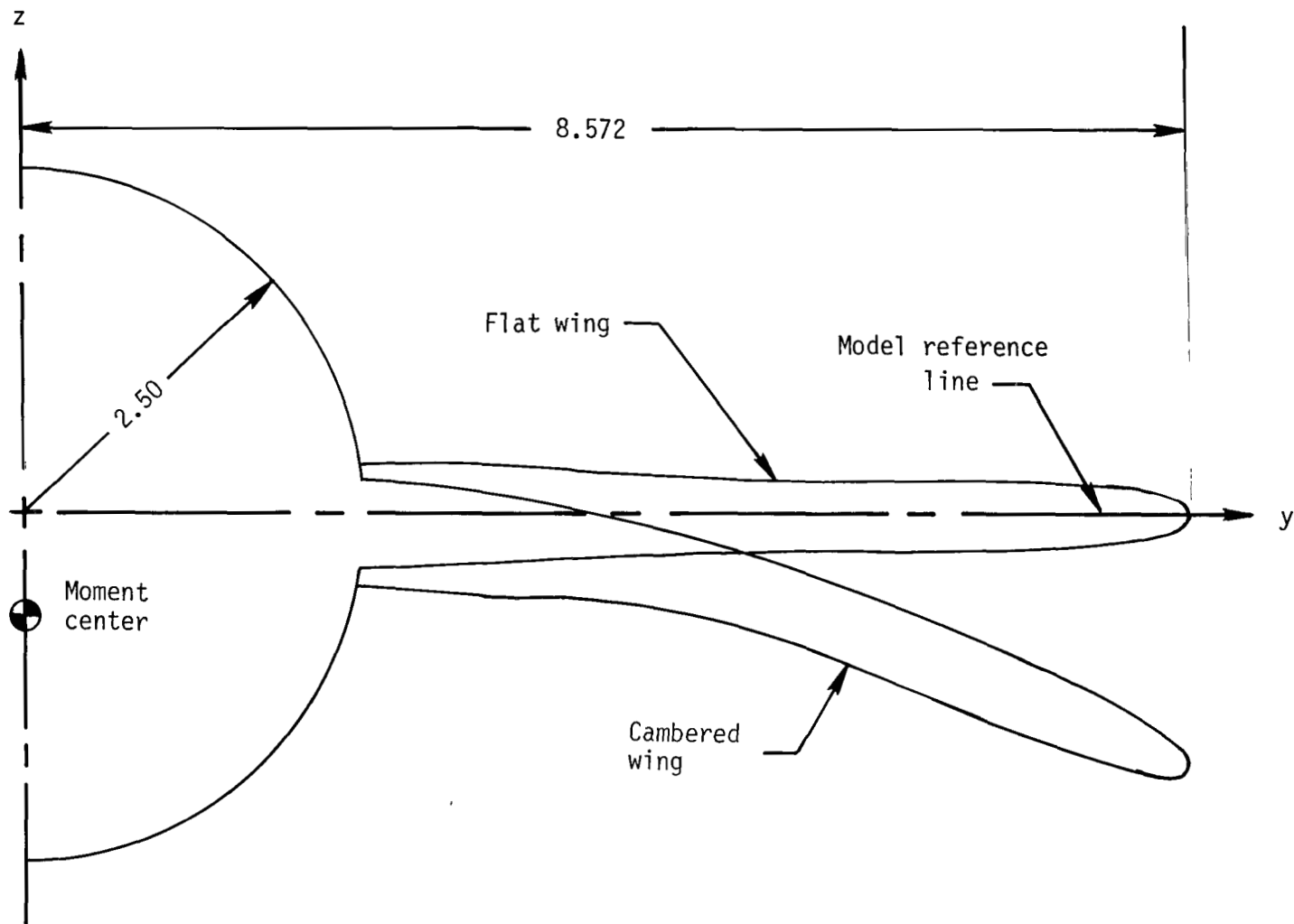


Figure 2.- Spanwise cross section. $x = 13.20$ in.; $x/l \leq 0.55$. All dimensions are given in inches.

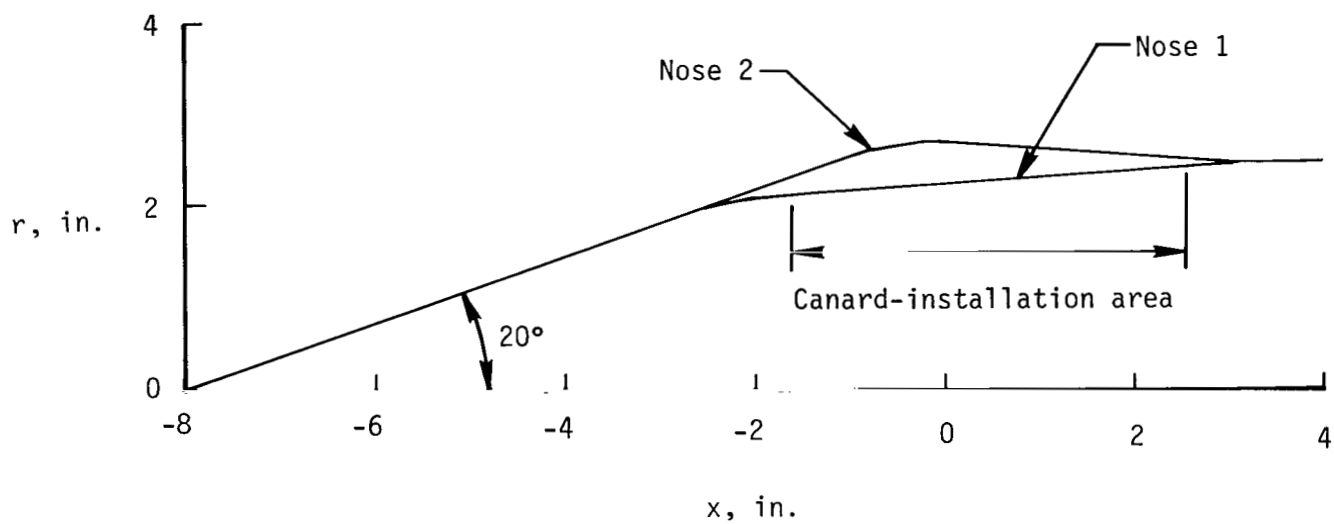
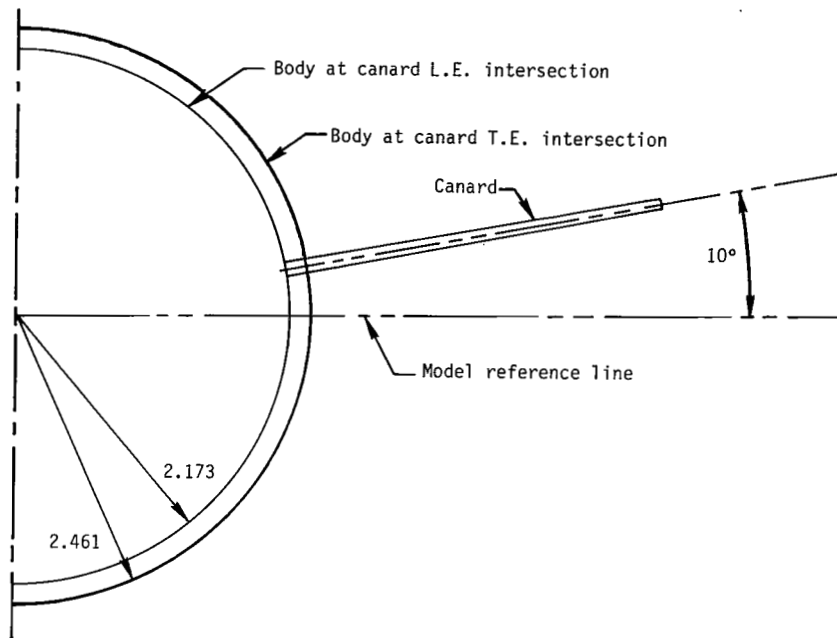
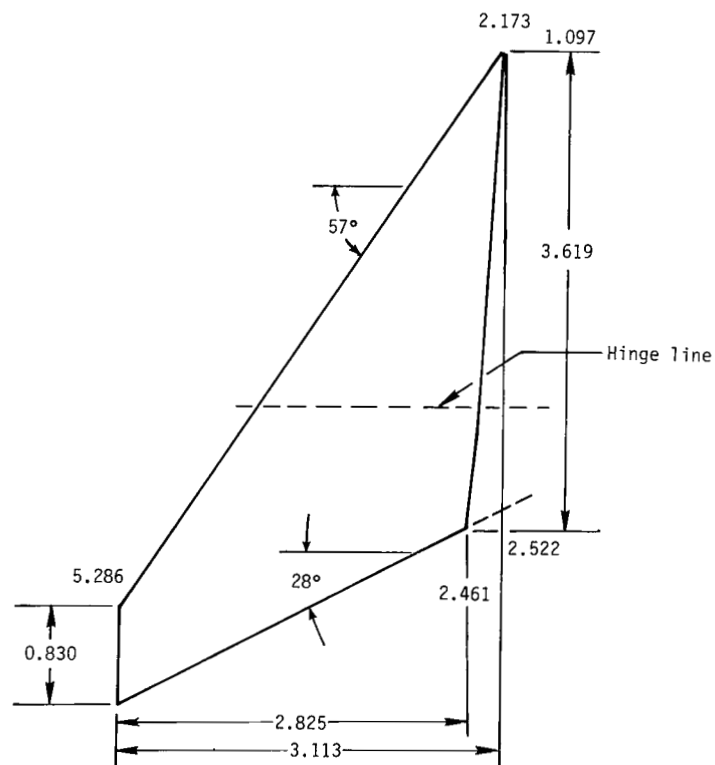


Figure 3.- Forebody radius distribution.

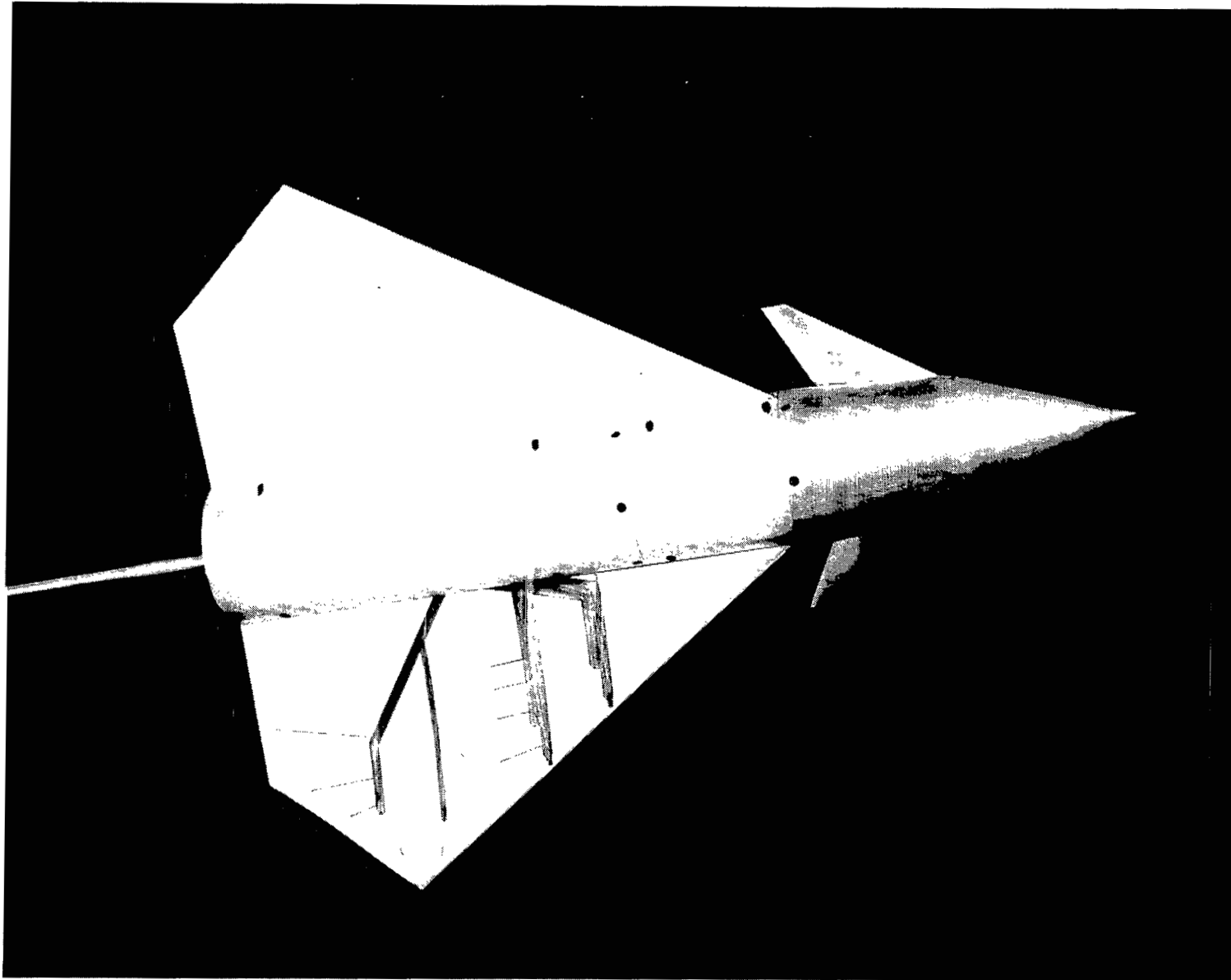


(a) Front view.



(b) Plan view.

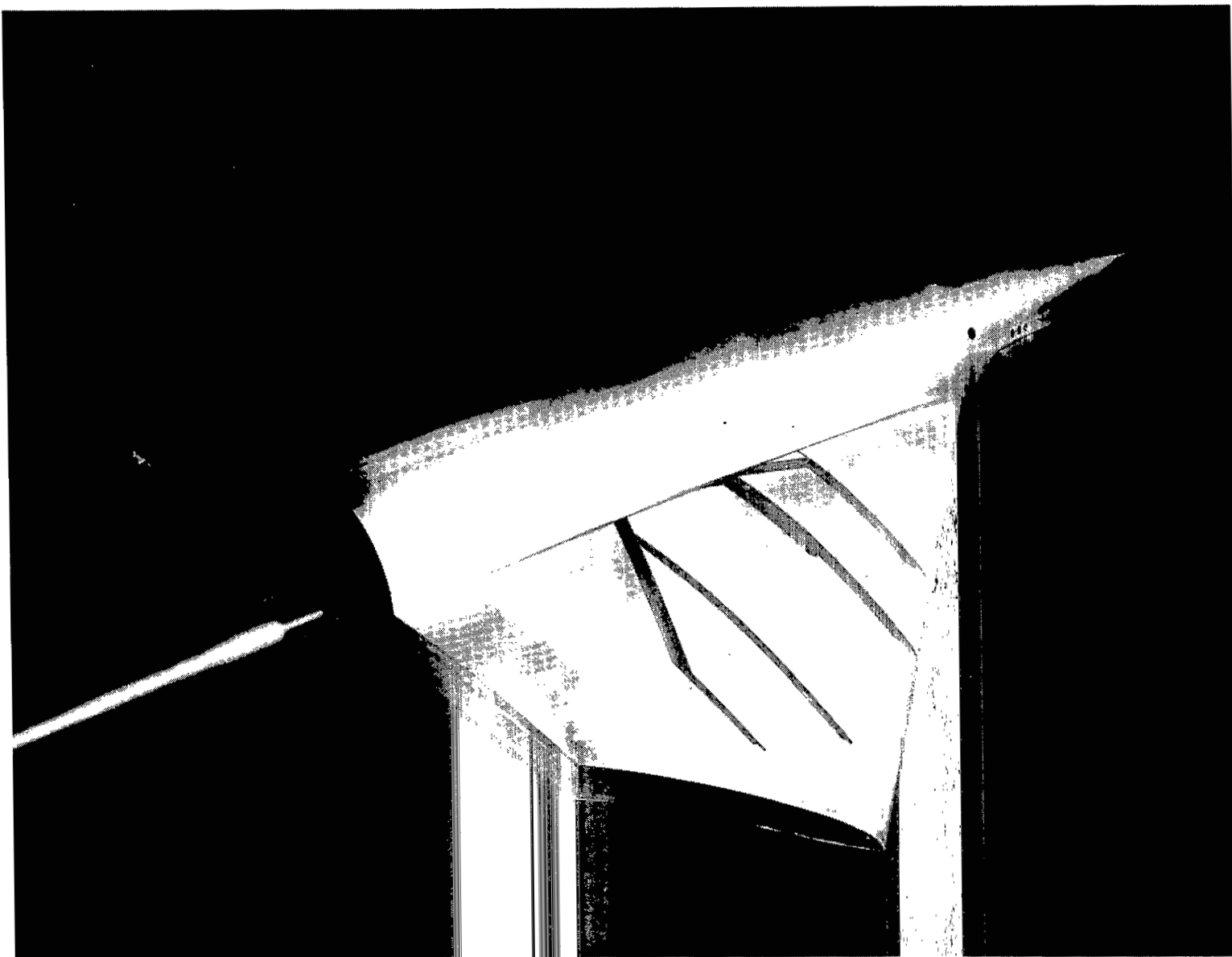
Figure 4.- Canard-installation details. Biconvex section, $t/c = 0.05$; linear twist distribution, 2.5° washout. All dimensions are given in inches unless otherwise specified.



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(a) Bottom view of cambered wing-body canard model.

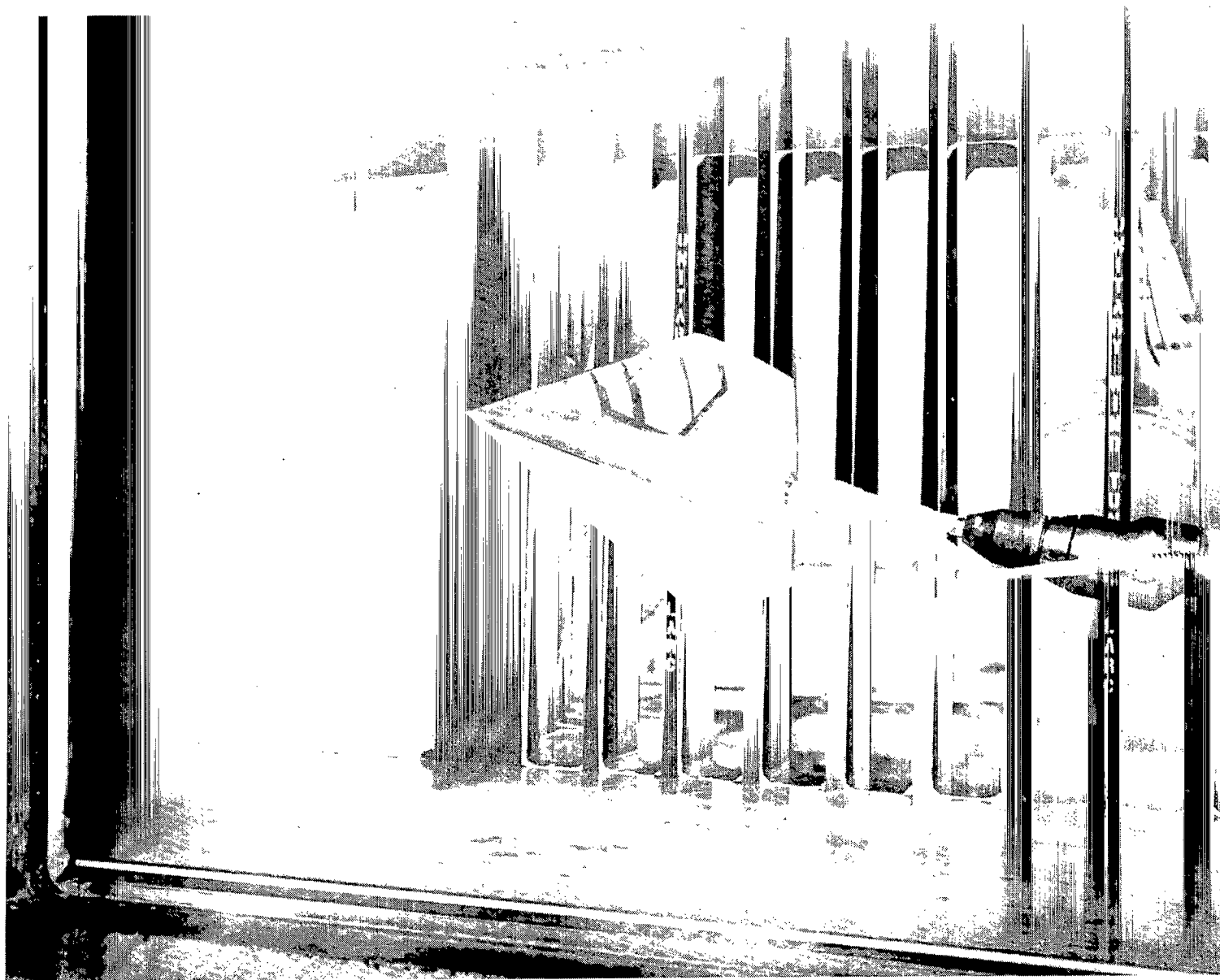
Figure 5.- Photographs of wind-tunnel models.



L-82-321

(b) Aft view of cambered wing-body-canard model.

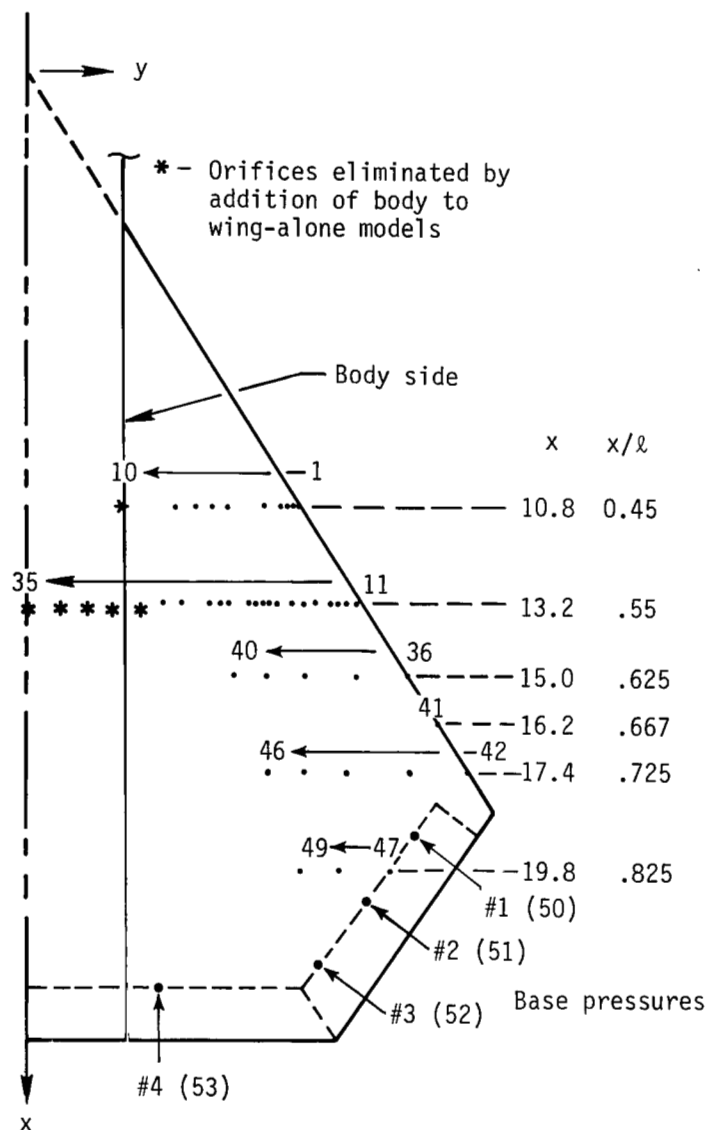
Figure 5.- Continued.



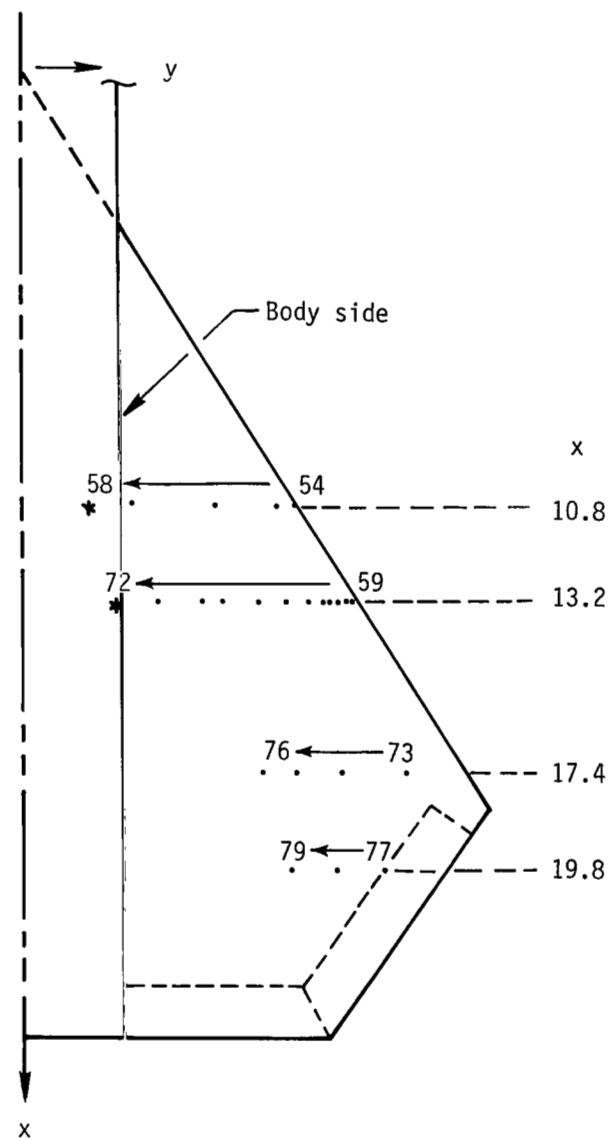
L-79-7698

(c) Bottom view of cambered wing alone from reference 2.

Figure 5.- Concluded.



(a) Upper surface.



(b) Lower surface.

Figure 6.- Pressure orifice locations.

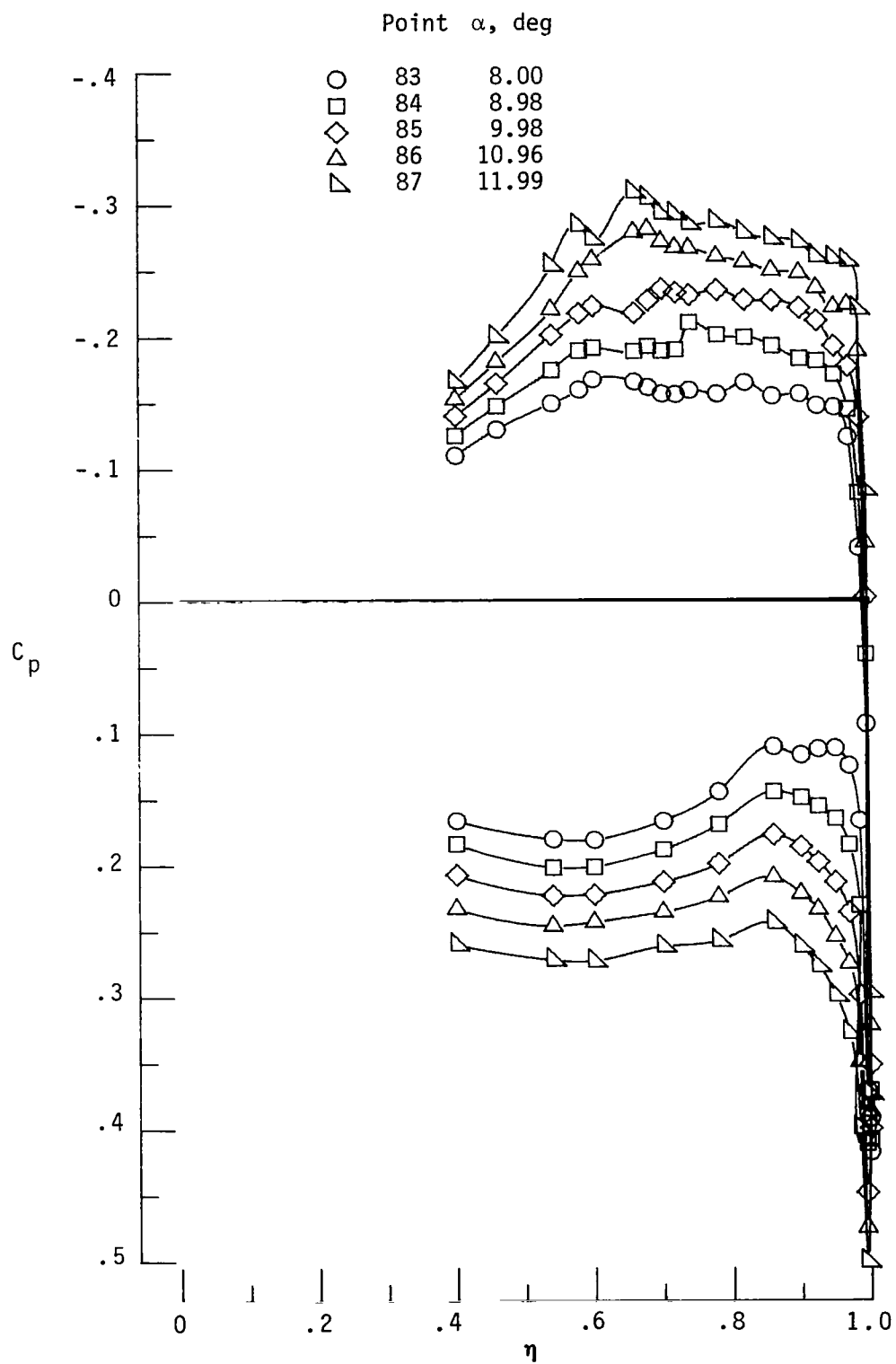
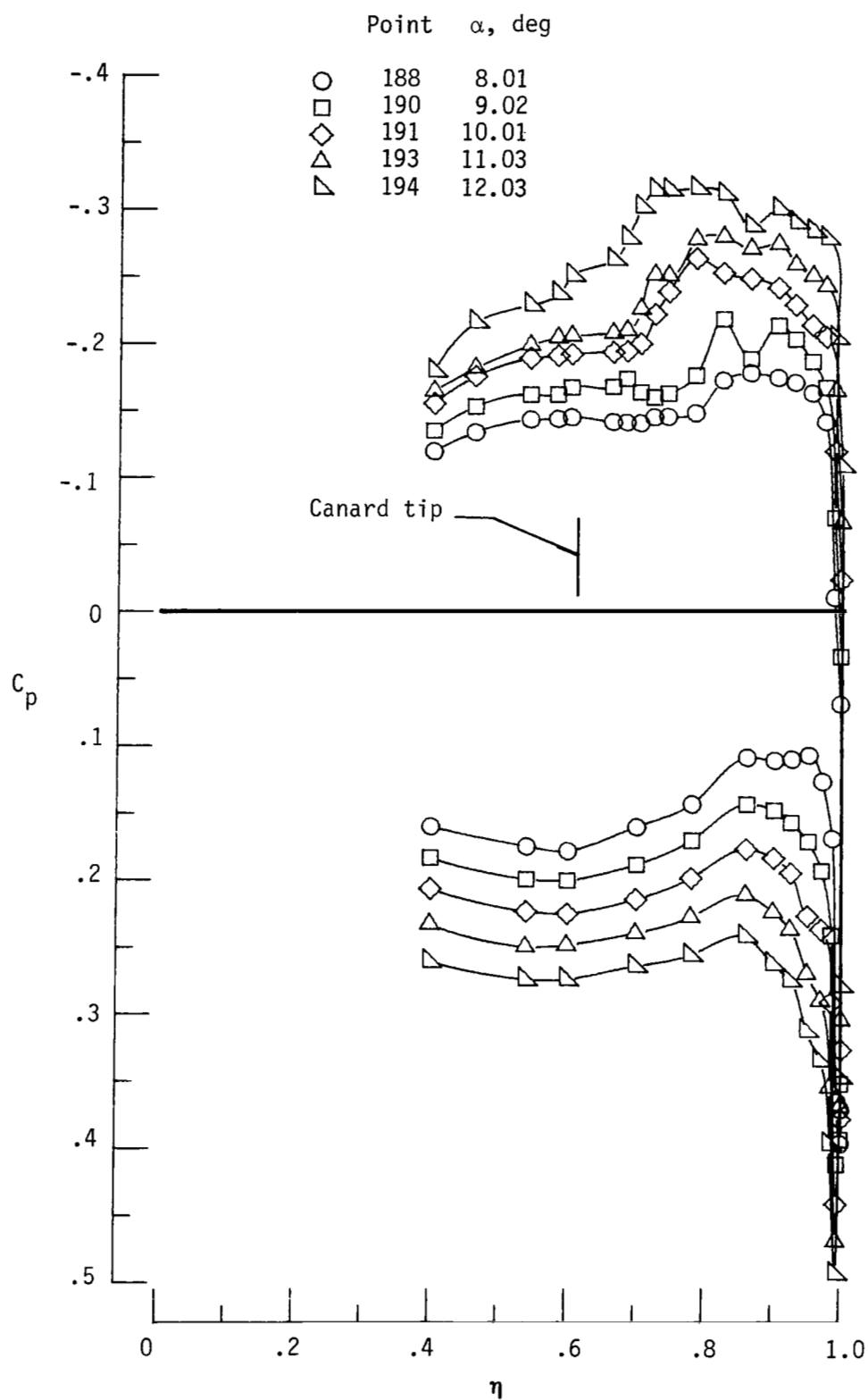
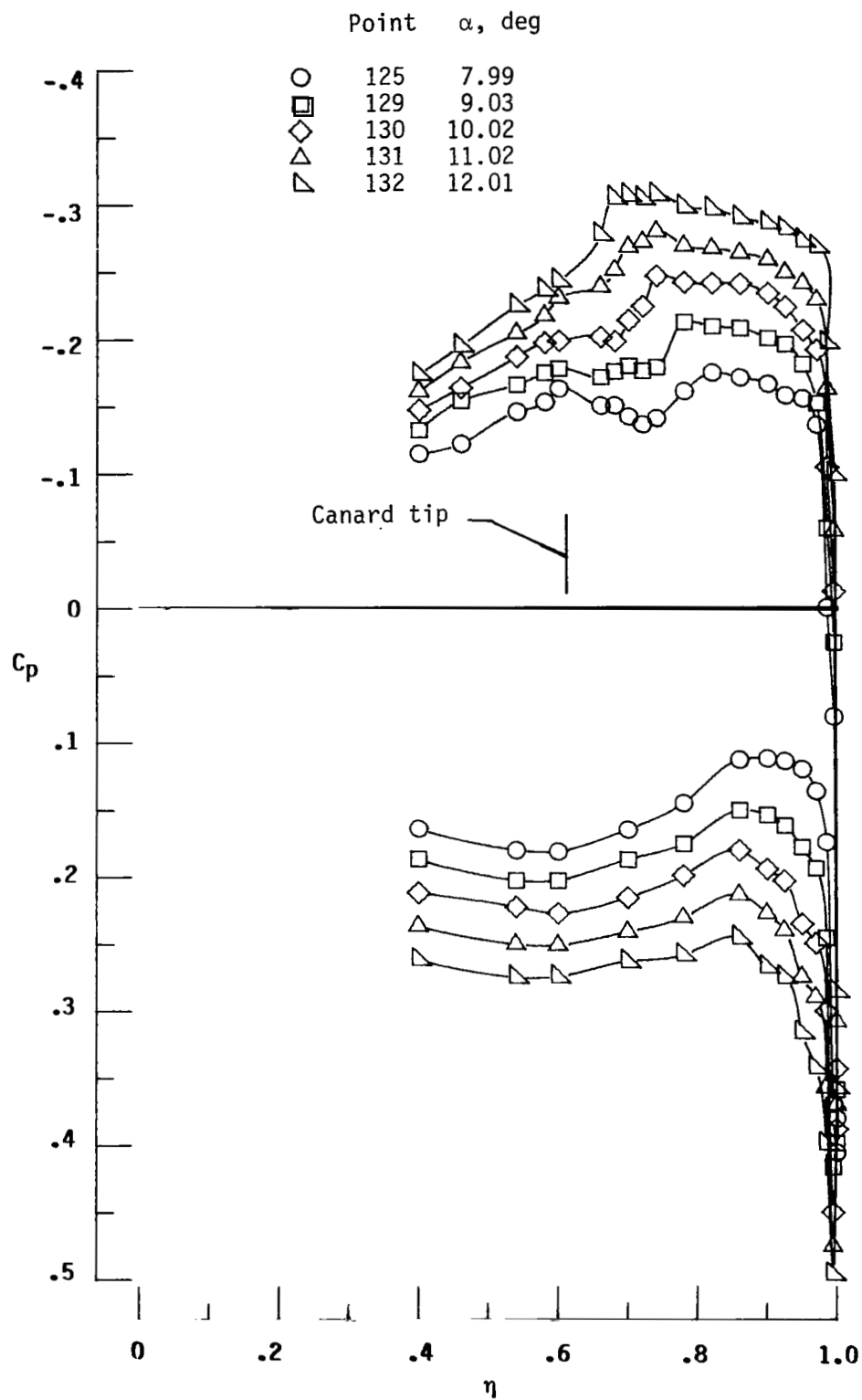


Figure 7.- Summary of pressure-coefficient data for cambered wing-body model (nose 1). $x/l = 0.55$; $M = 1.62$.



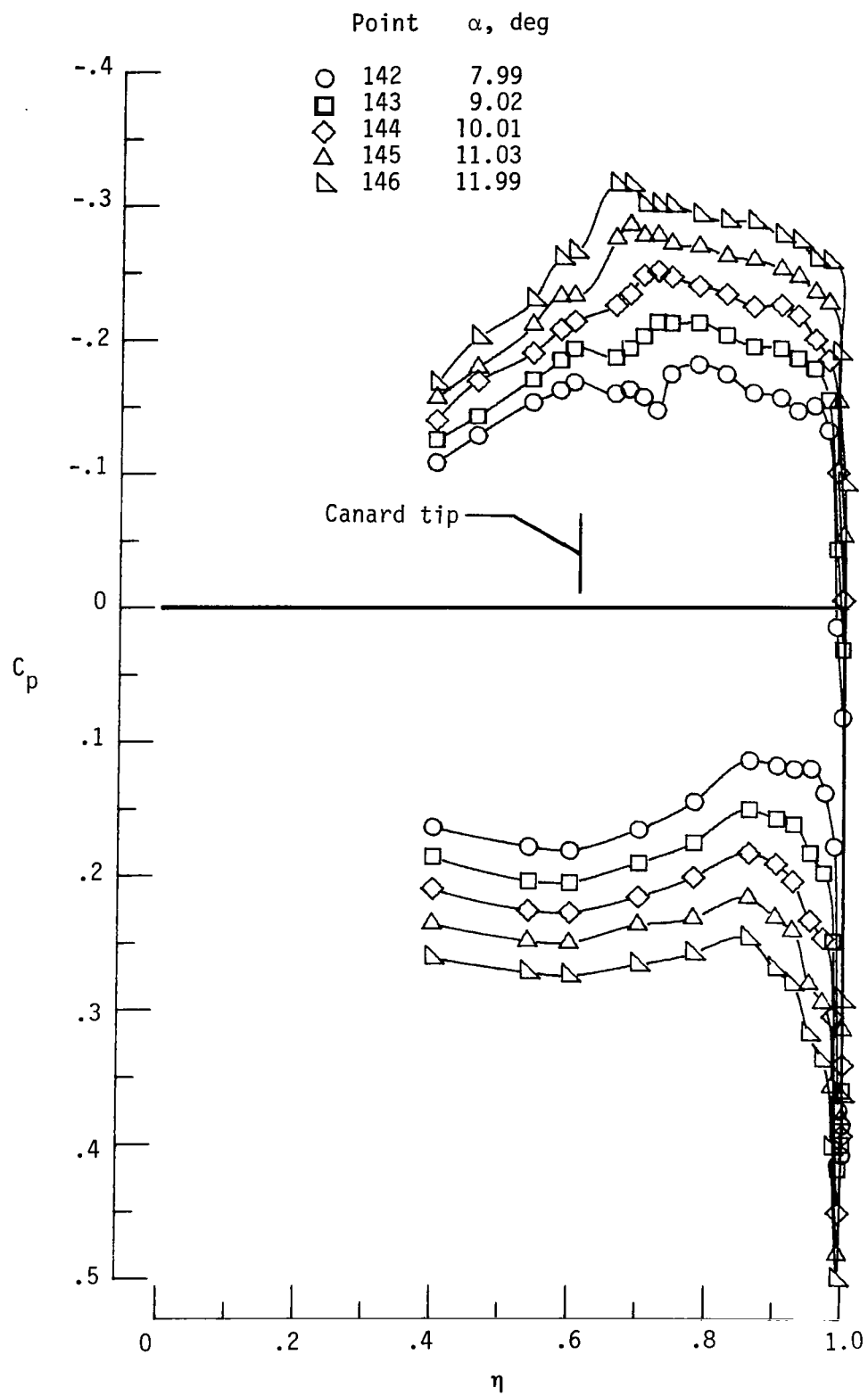
(a) $\delta_c = 0^\circ$.

Figure 8.- Summary of pressure-coefficient data for cambered wing-body-canard model (nose 1). $x/l = 0.55$; $M = 1.62$.



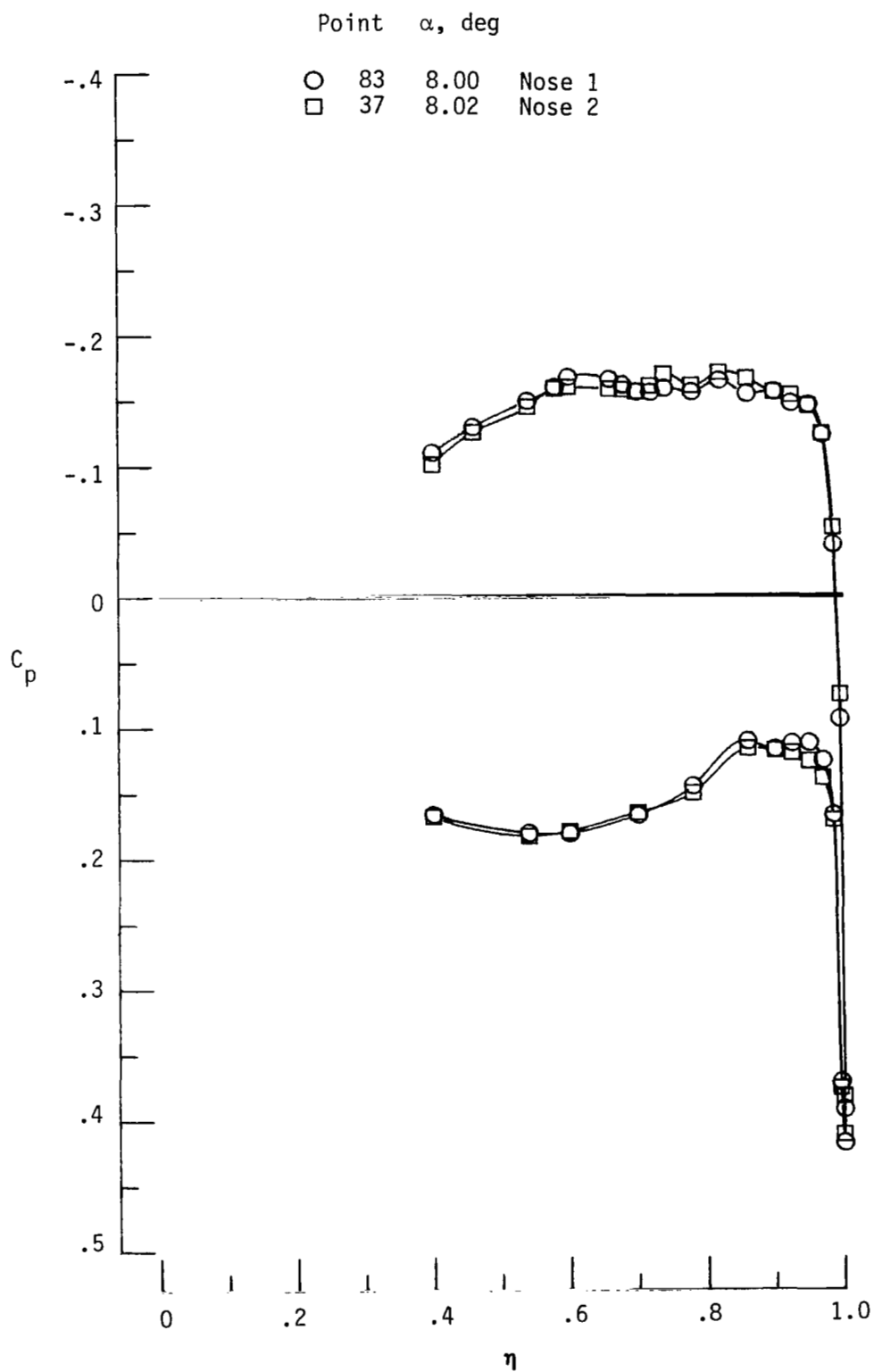
(b) $\delta_c = -5^\circ$.

Figure 8.- Continued.



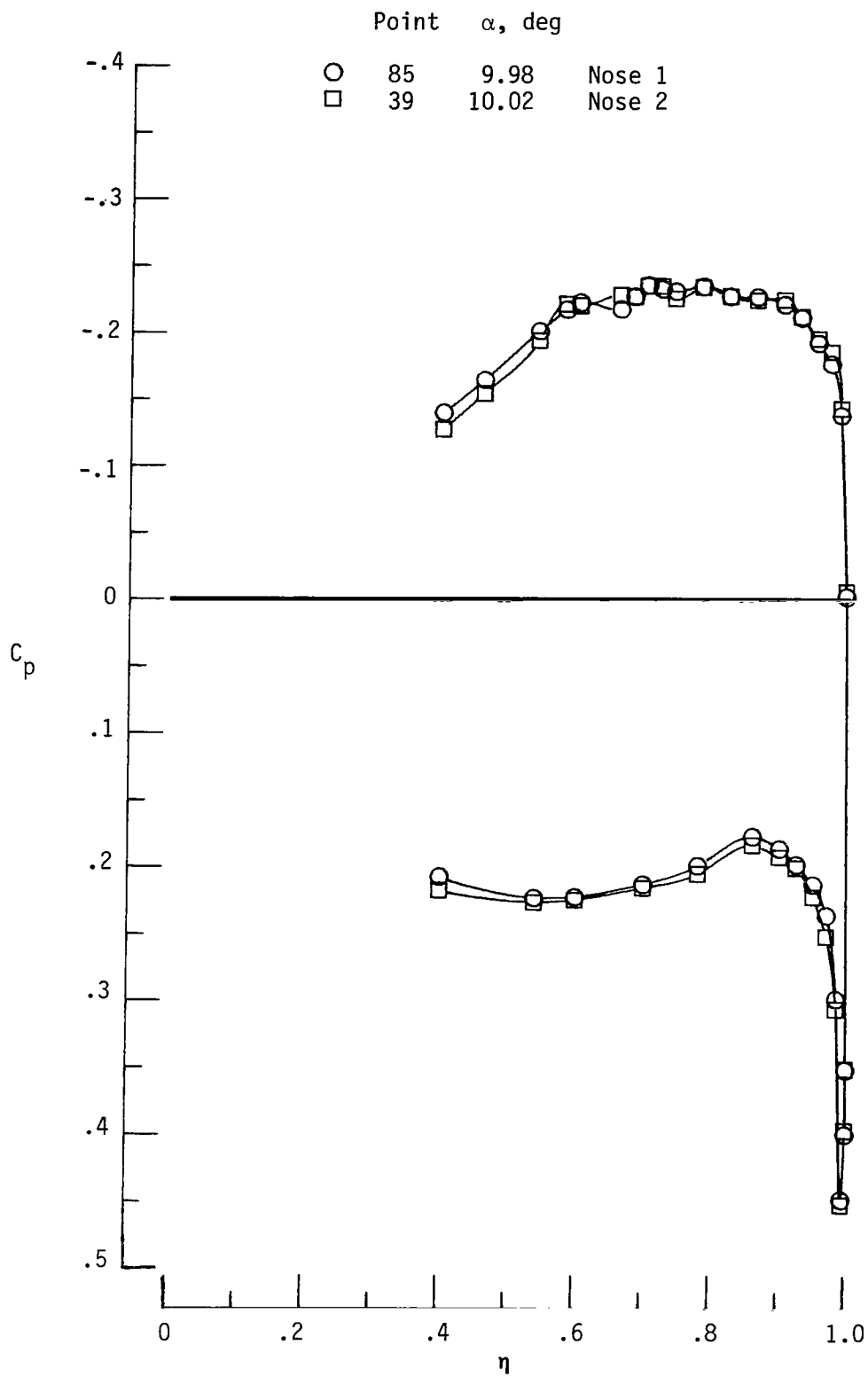
(c) $\delta_c = -10^\circ$.

Figure 8.- Concluded.



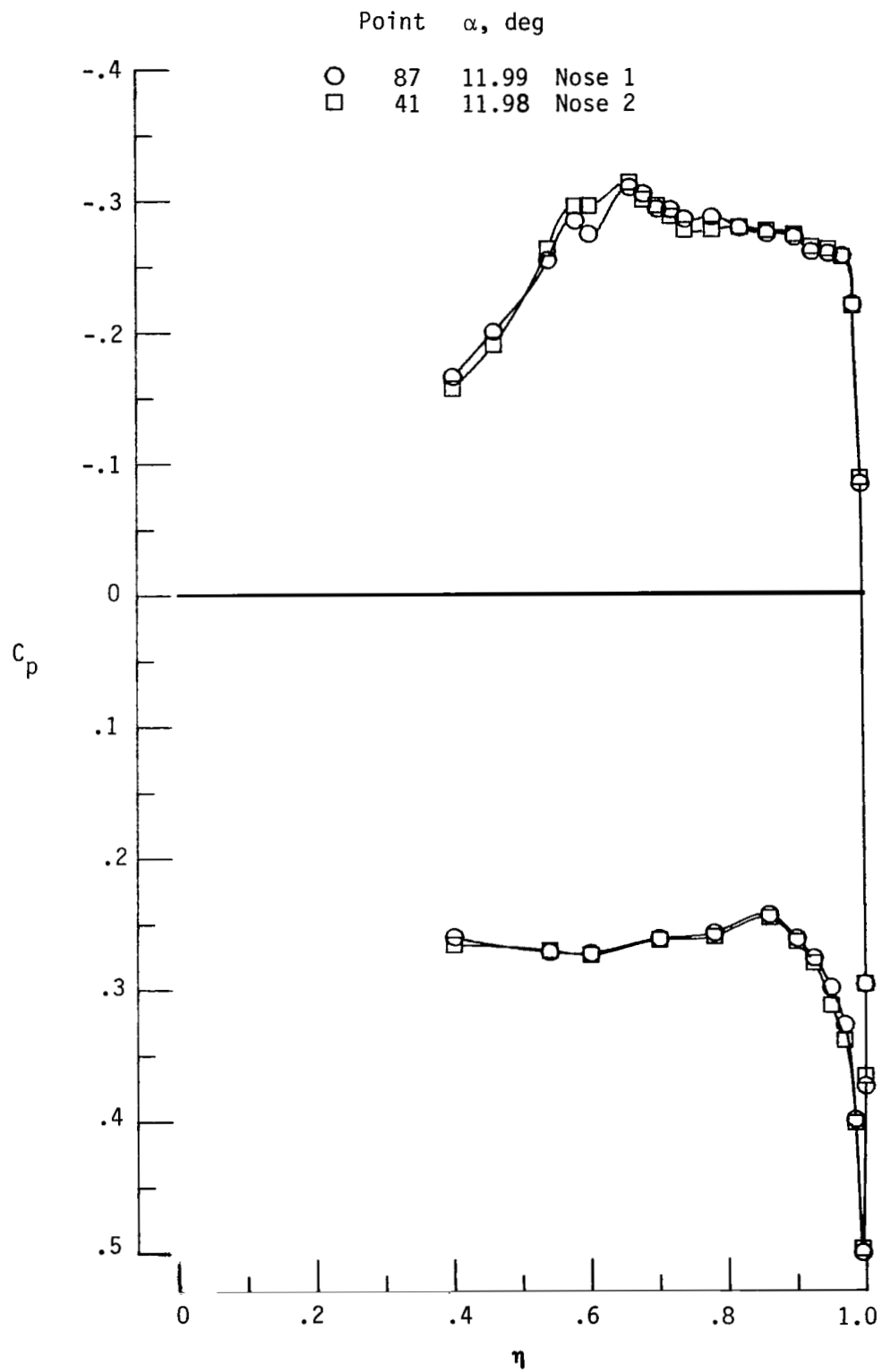
(a) $\alpha \approx 8^\circ$.

Figure 9.- Effect of forebody shape on cambered wing-body pressure distributions. $x/l = 0.55$; $M = 1.62$.



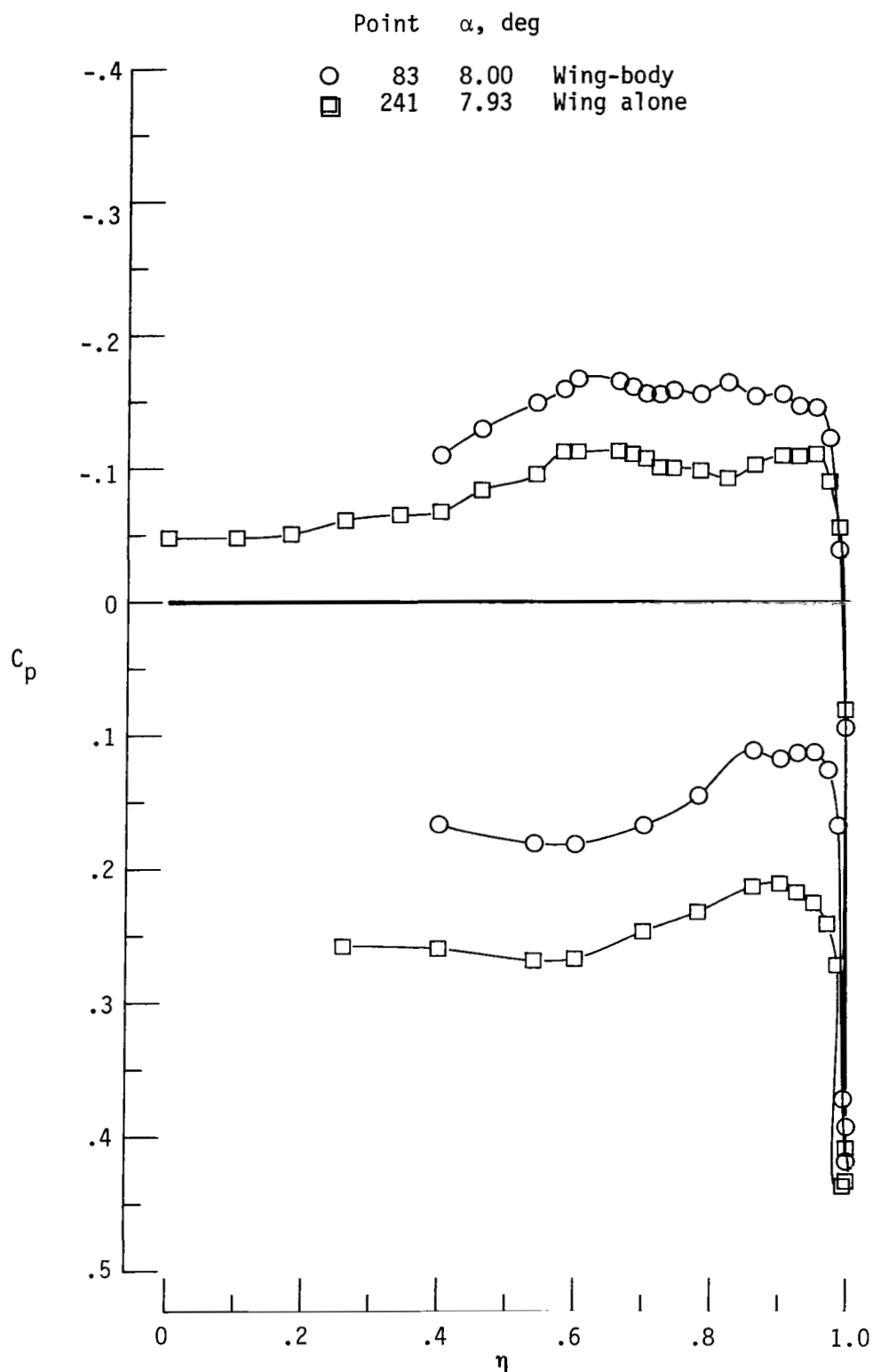
(b) $\alpha \approx 10^\circ$.

Figure 9.- Continued.



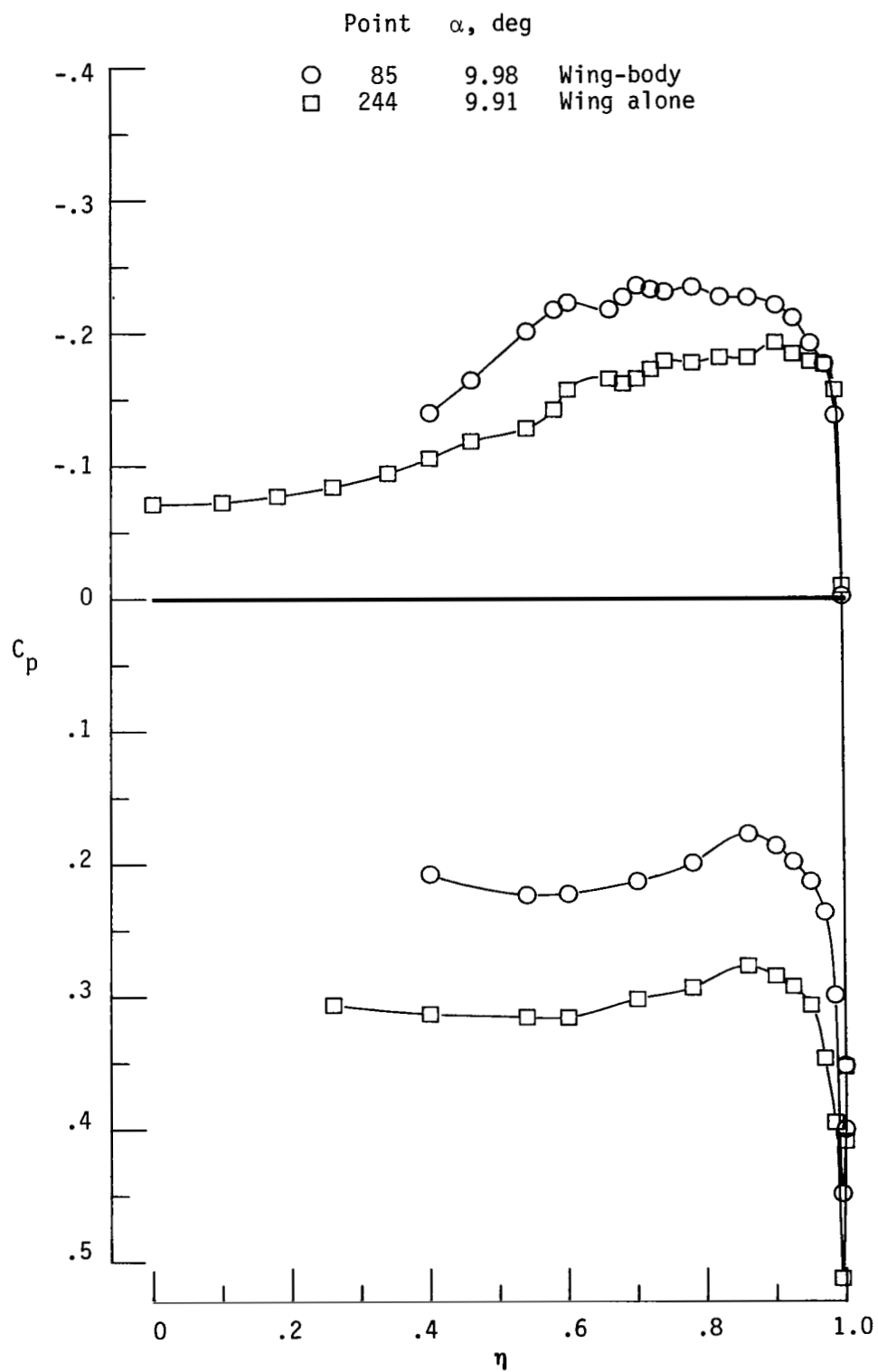
(c) $\alpha \approx 12^\circ$.

Figure 9.- Concluded.



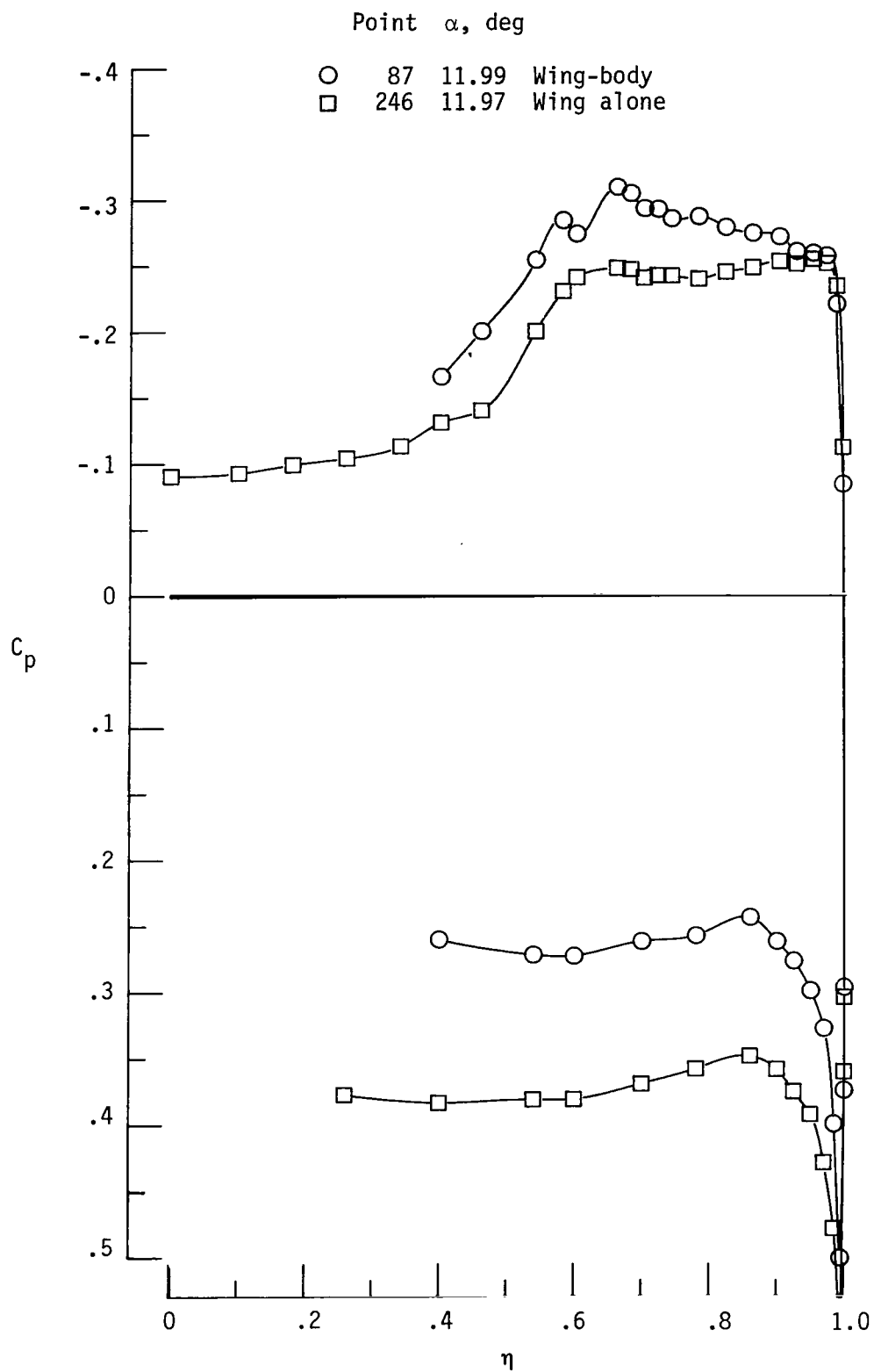
(a) $\alpha \approx 8^\circ$.

Figure 10.- Effect of cone-cylinder body (nose 1) on cambered-wing pressure distributions. $x/l = 0.55$; $M = 1.62$.



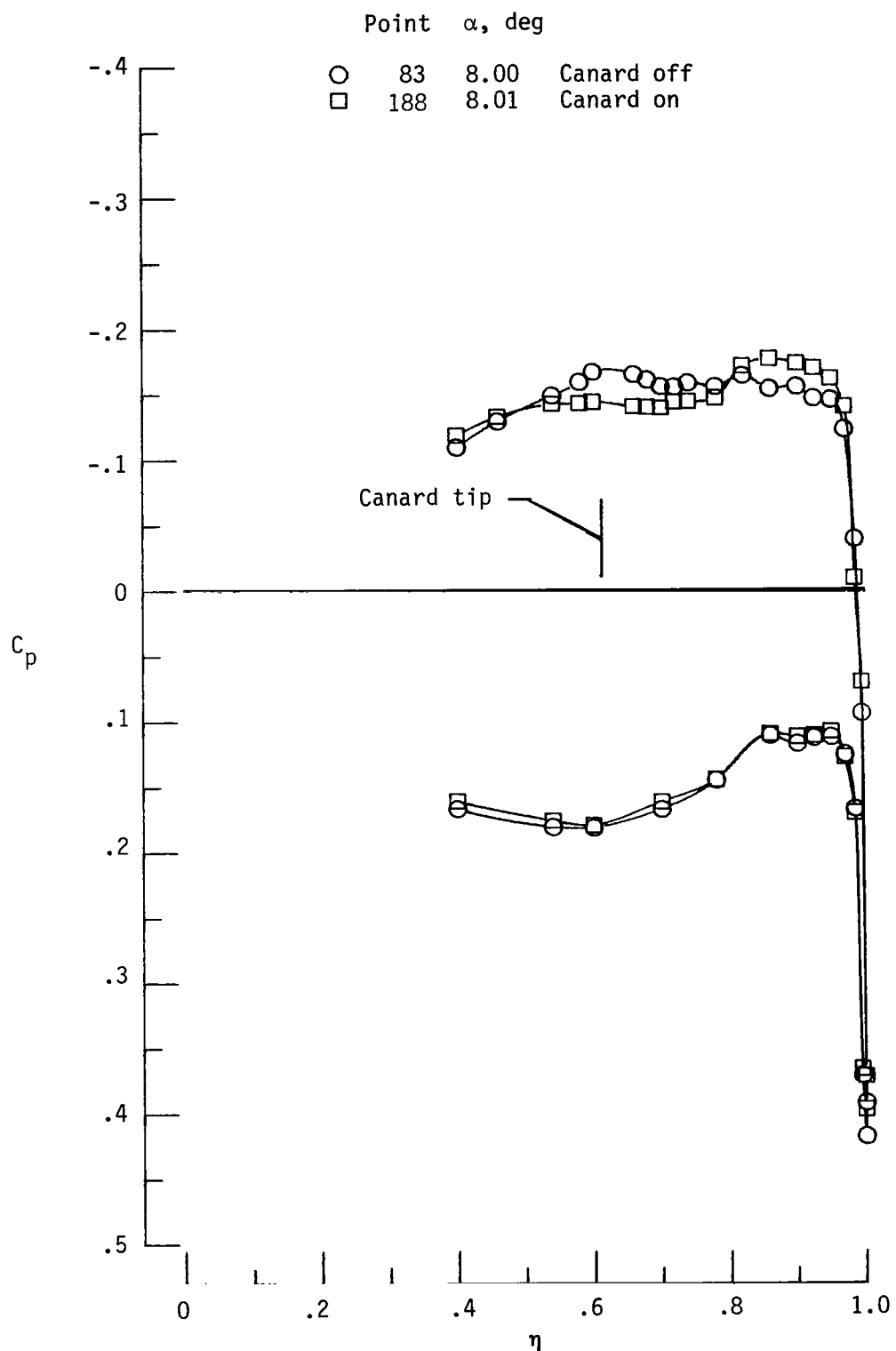
(b) $\alpha \approx 10^\circ$.

Figure 10.- Continued.



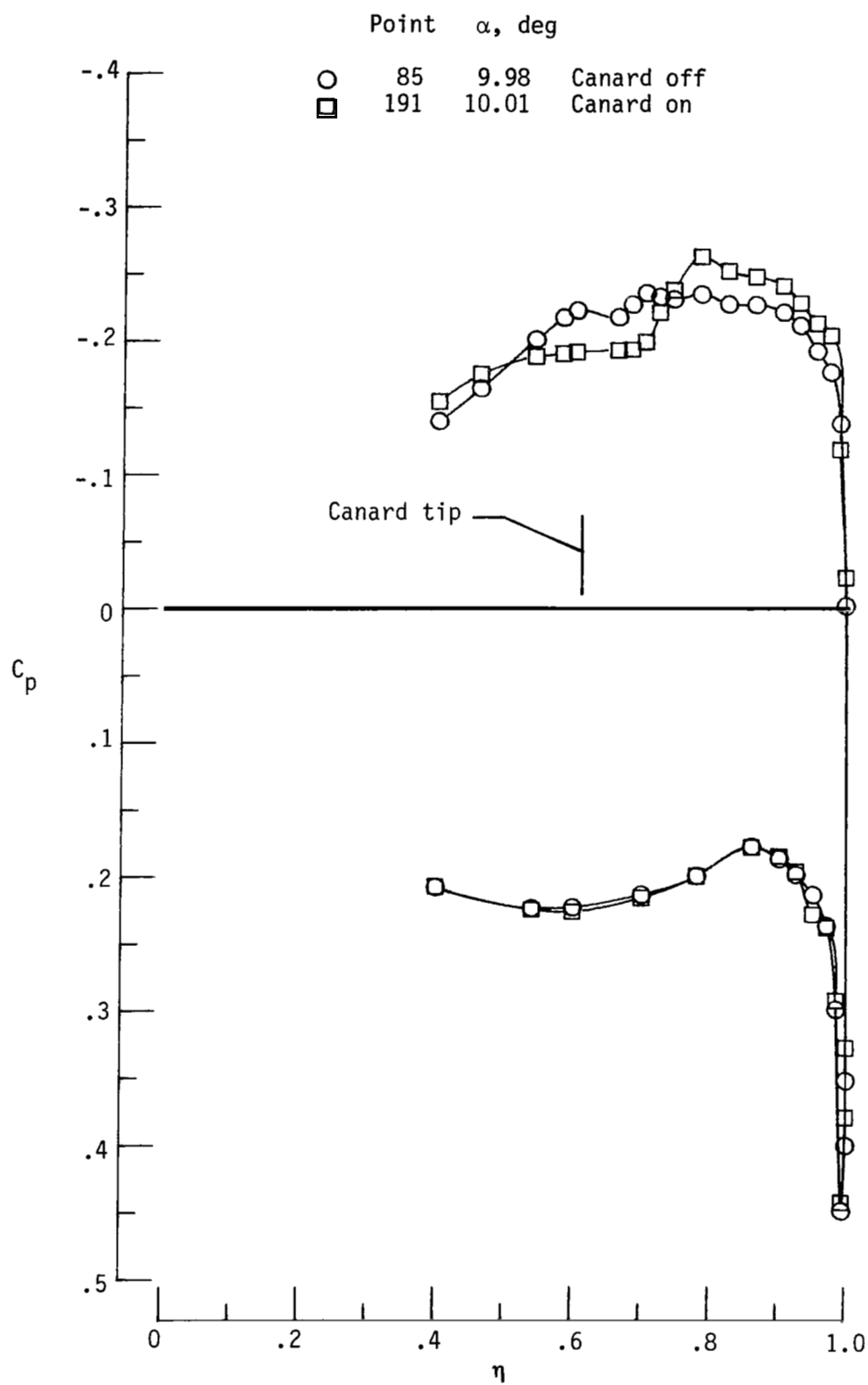
(c) $\alpha \approx 12^\circ$.

Figure 10.- Concluded.



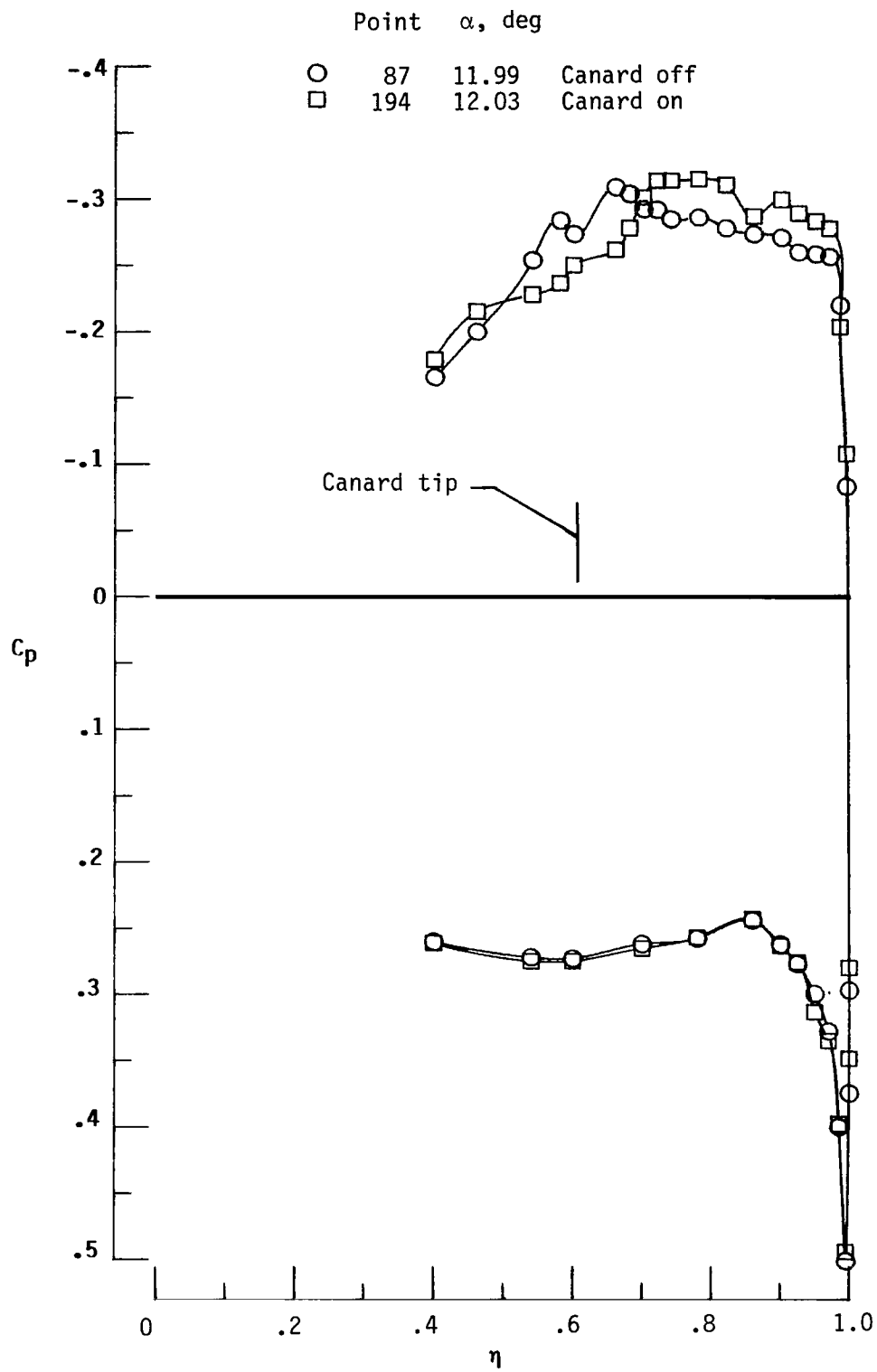
(a) $\alpha \approx 8^\circ$.

Figure 11.- Canard influence on cambered wing-body (nose 1) pressure distributions. $\delta_c = 0^\circ$; $x/l = 0.55$; $M = 1.62$.



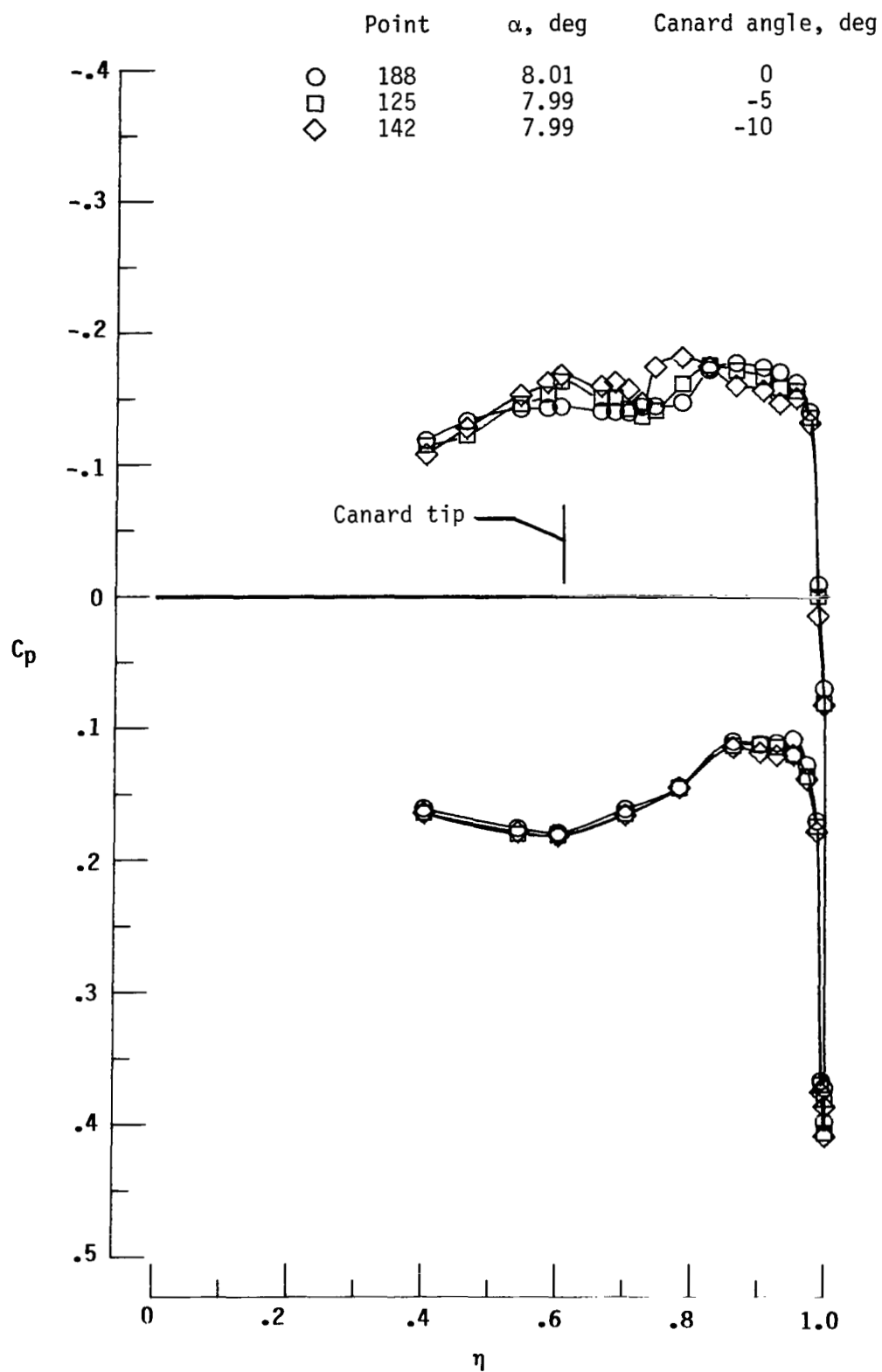
(b) $\alpha \approx 10^\circ$.

Figure 11.- Continued.



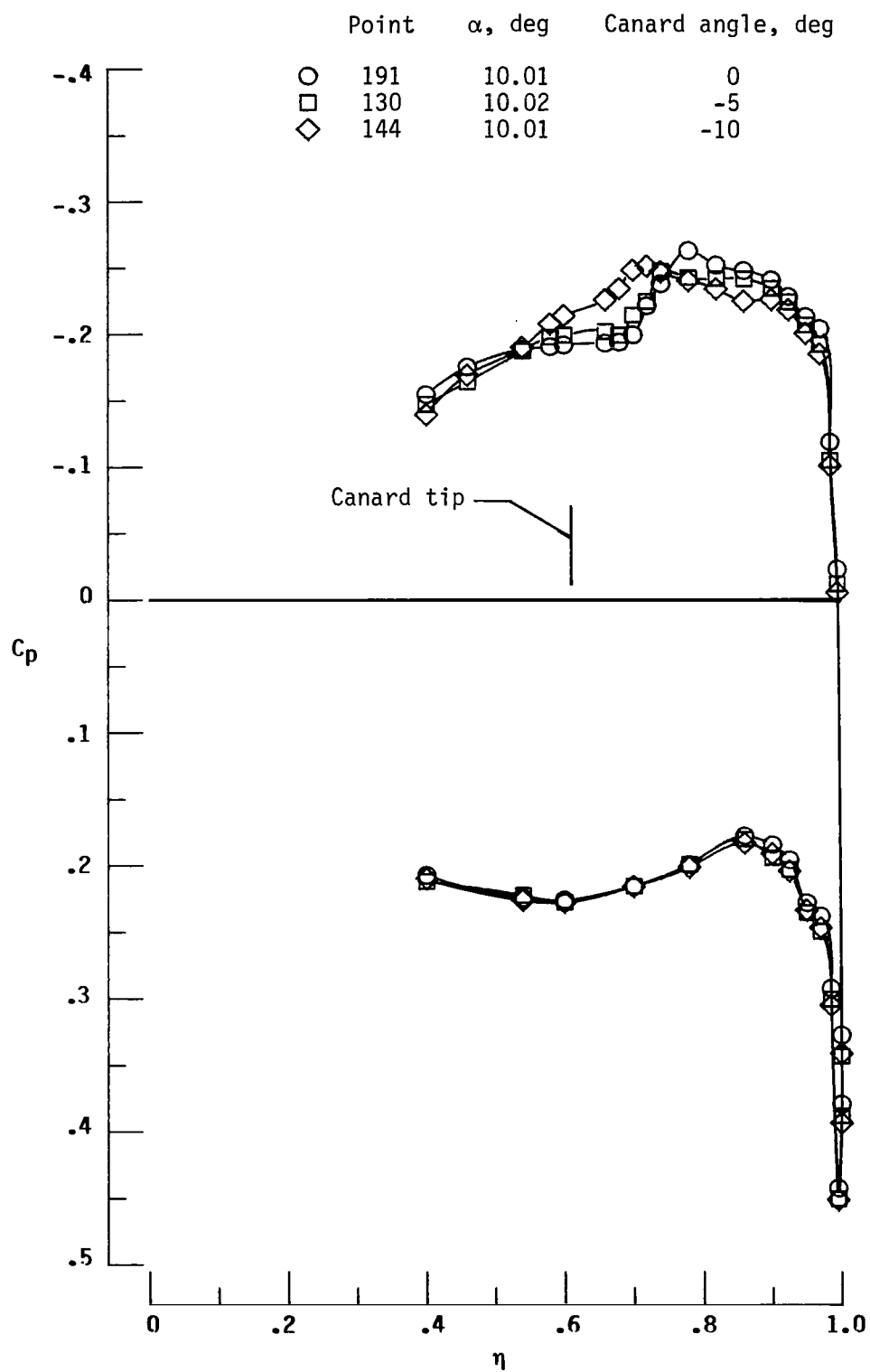
(c) $\alpha \approx 12^\circ$.

Figure 11.- Concluded.



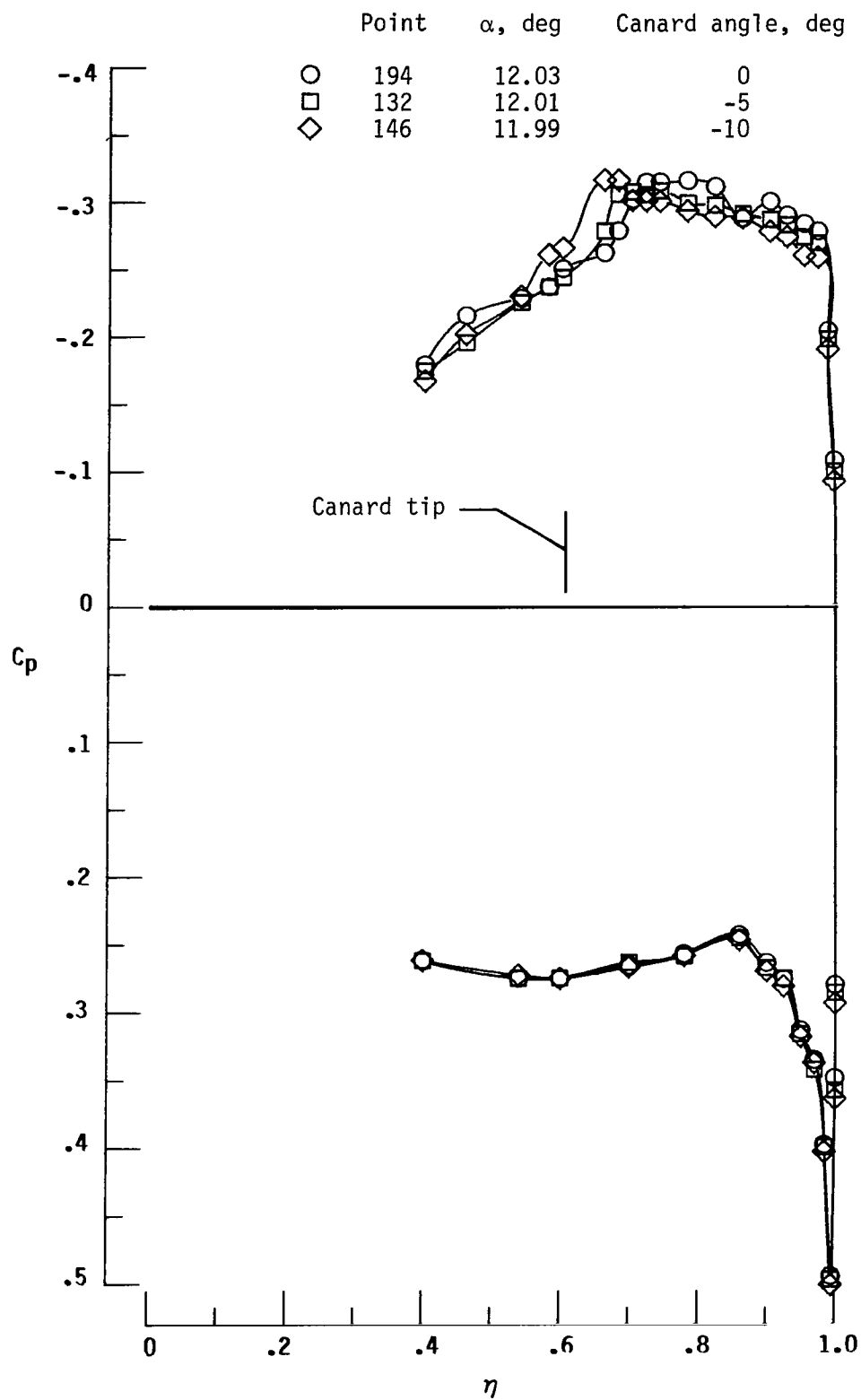
(a) $\alpha \approx 8^\circ$.

Figure 12.- Effect of canard incidence angle on cambered-wing pressure distributions. $x/\lambda = 0.55$; $M = 1.62$.



(b) $\alpha \approx 10^\circ$.

Figure 12.- Continued.



(c) $\alpha \approx 12^\circ$.

Figure 12.- Concluded.

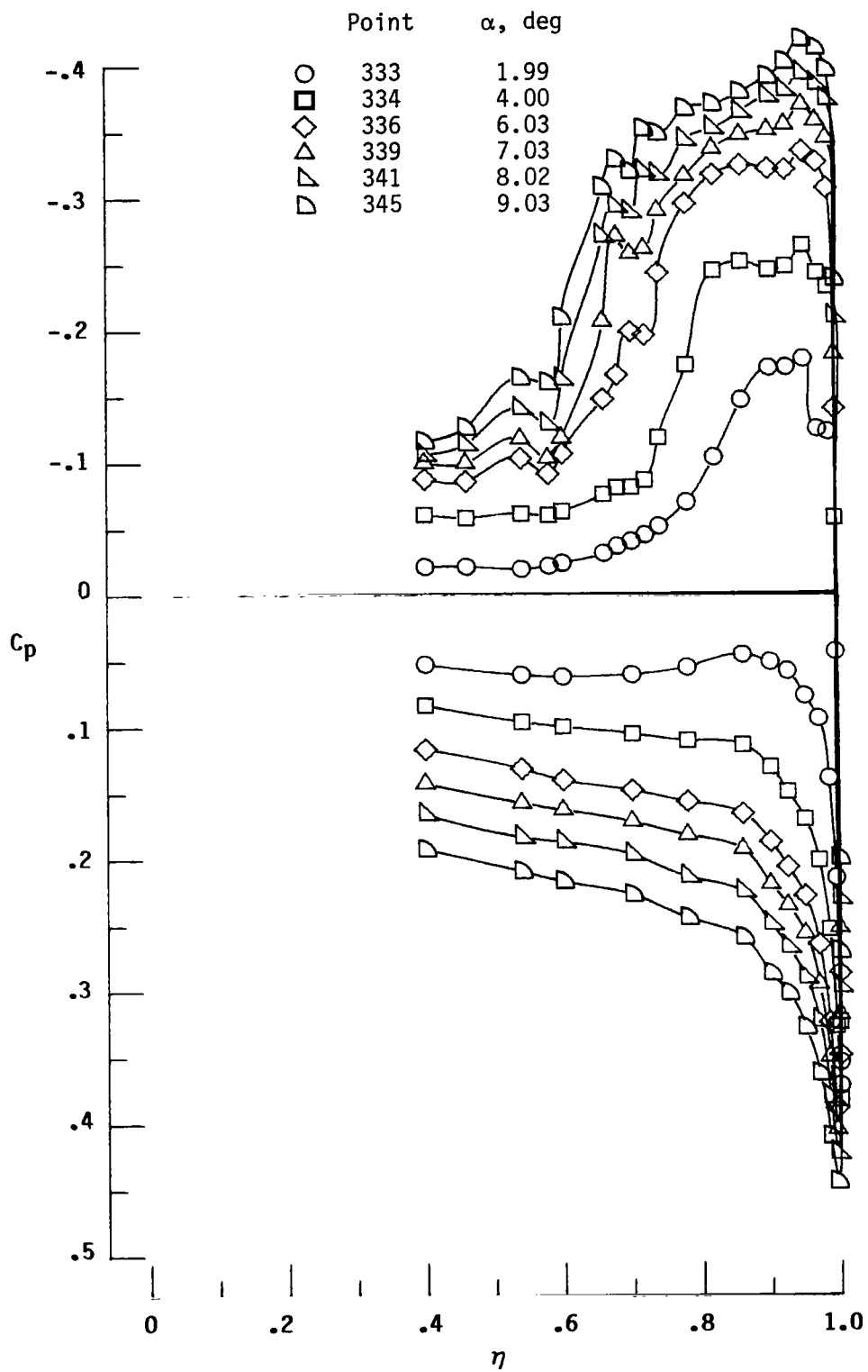
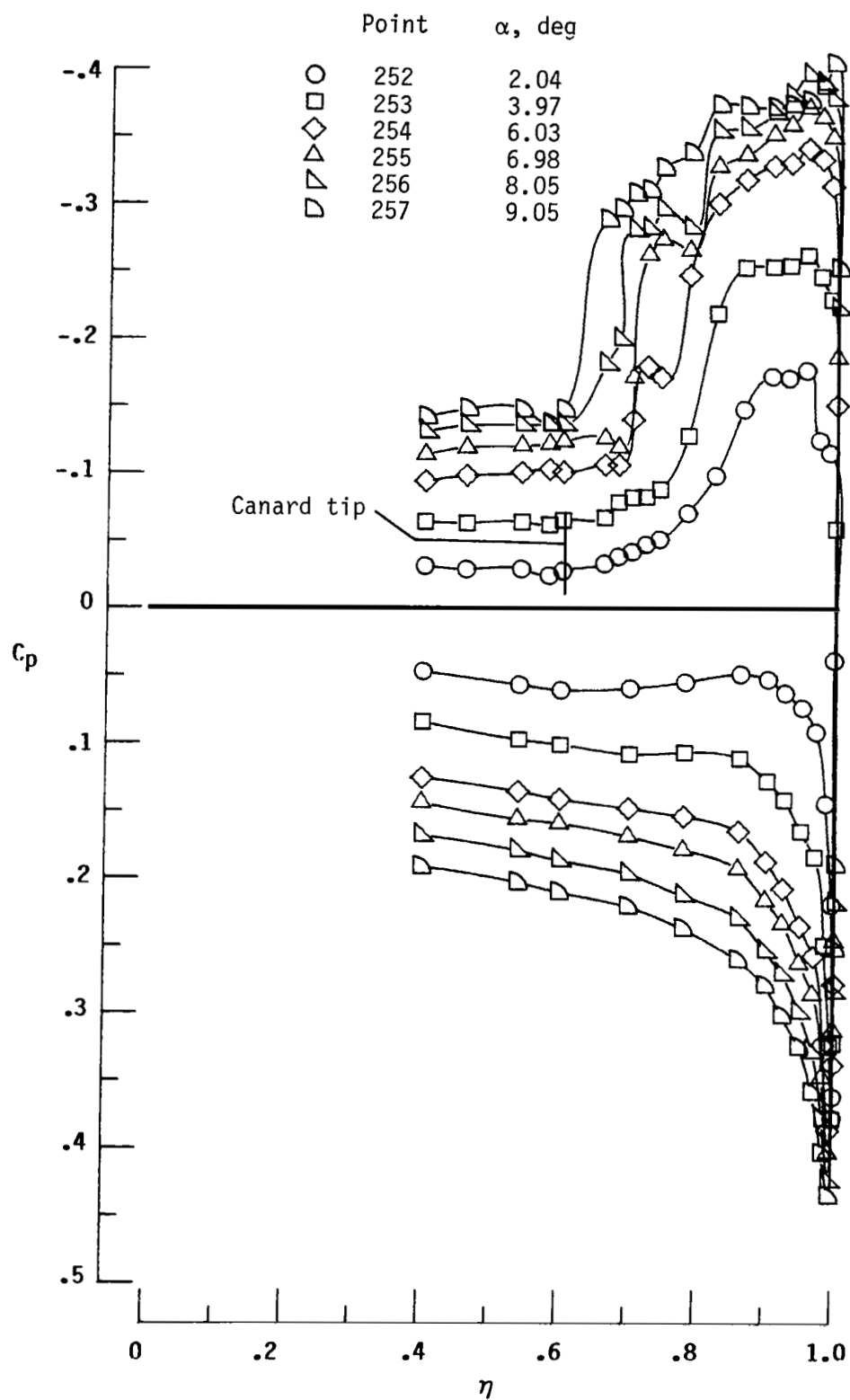
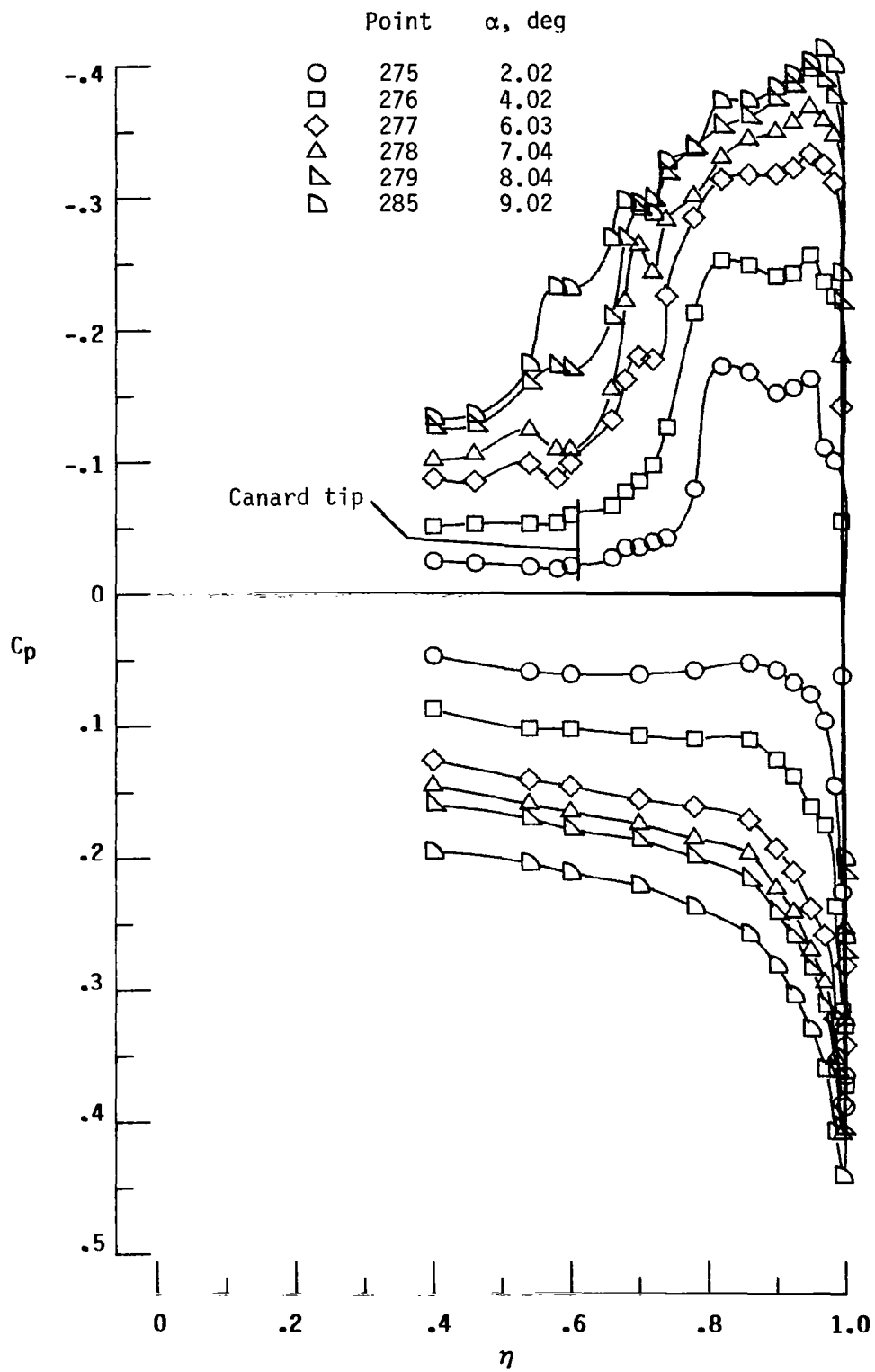


Figure 13.- Summary of pressure-coefficient data for flat wing-body model (nose 1). $x/\lambda = 0.55$; $M = 1.62$.



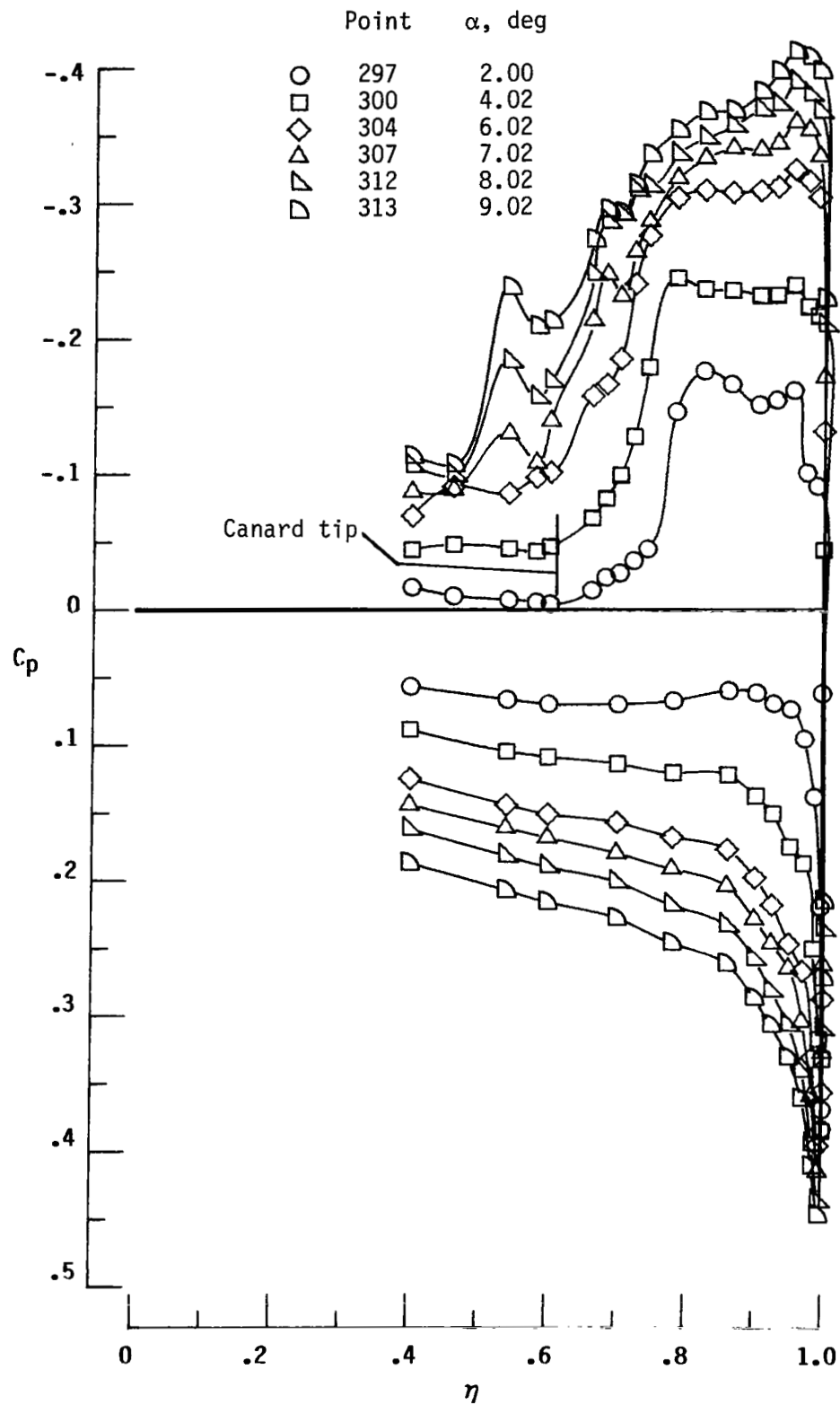
(a) $\delta_c = 0^\circ$.

Figure 14.- Summary of pressure-coefficient data for flat wing-body-canard model (nose 1). $x/l = 0.55$; $M = 1.62$.



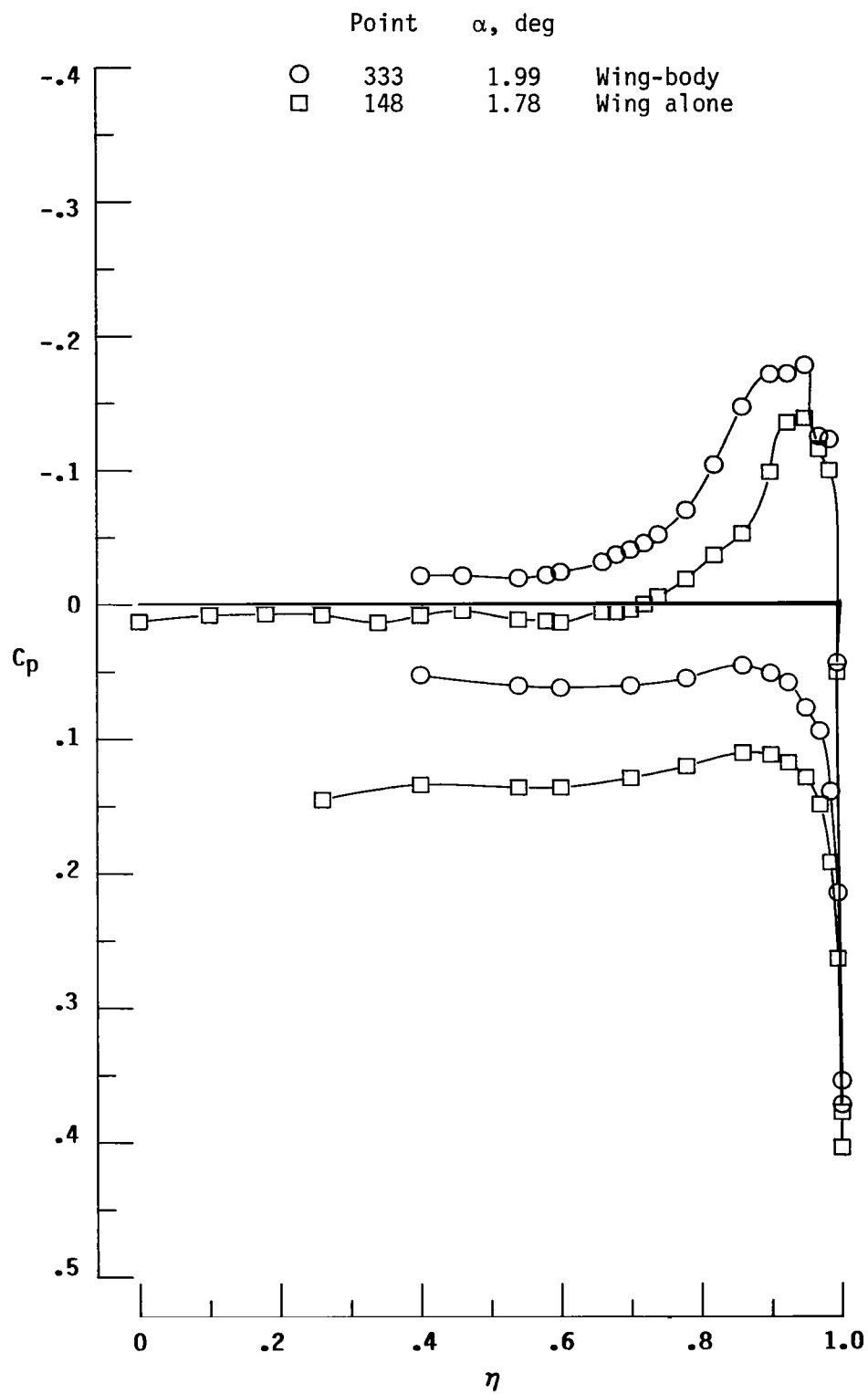
(b) $\delta_c = -5^\circ$.

Figure 14.- Continued.



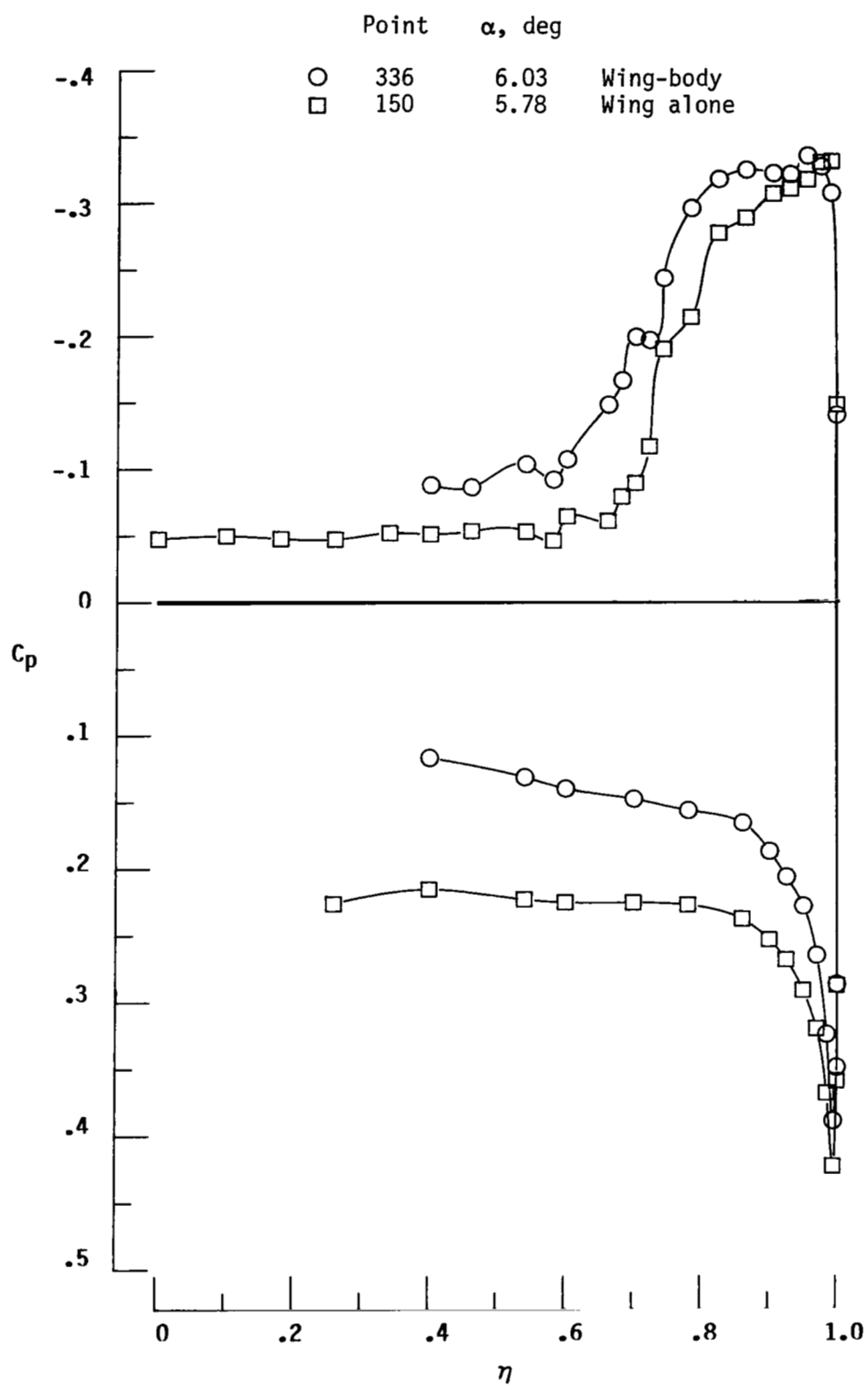
(c) $\delta_c = -10^\circ$.

Figure 14.- Concluded.



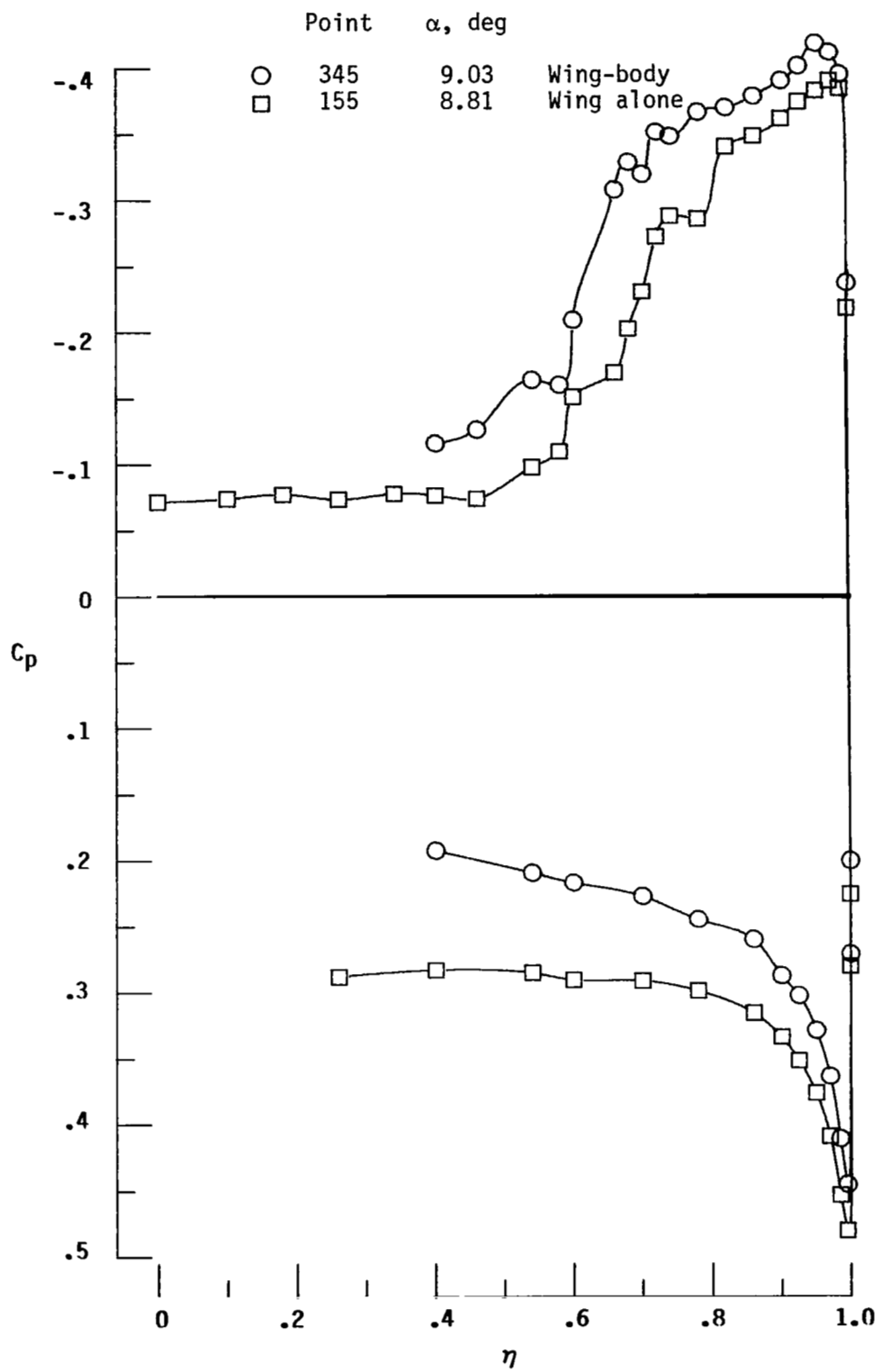
(a) $\alpha \approx 2^\circ$.

Figure 15.- Effect of cone-cylinder body (nose 1) on flat-wing pressure distributions. $x/l = 0.55$; $M = 1.62$.



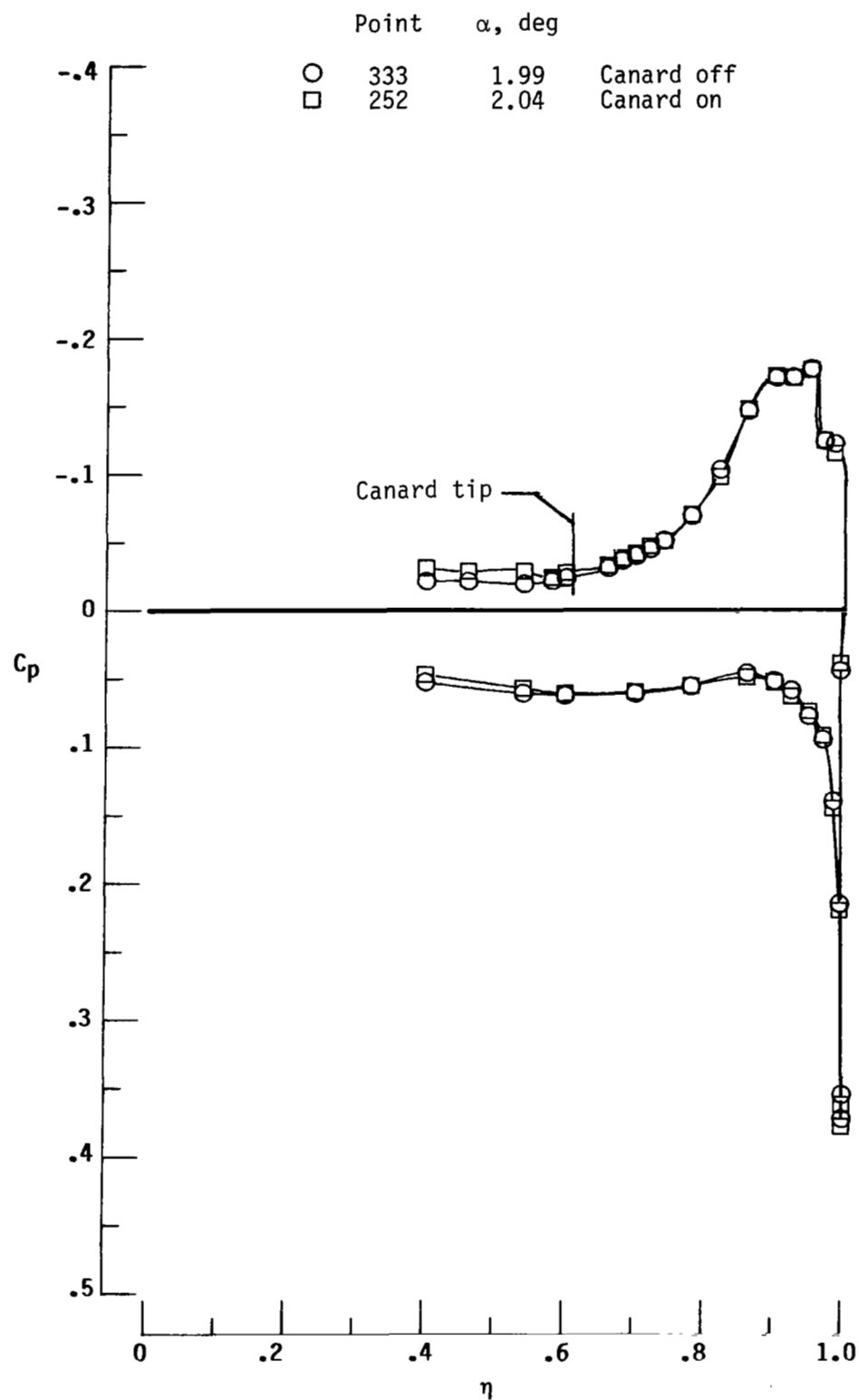
(b) $\alpha \approx 6^\circ$.

Figure 15.- Continued.



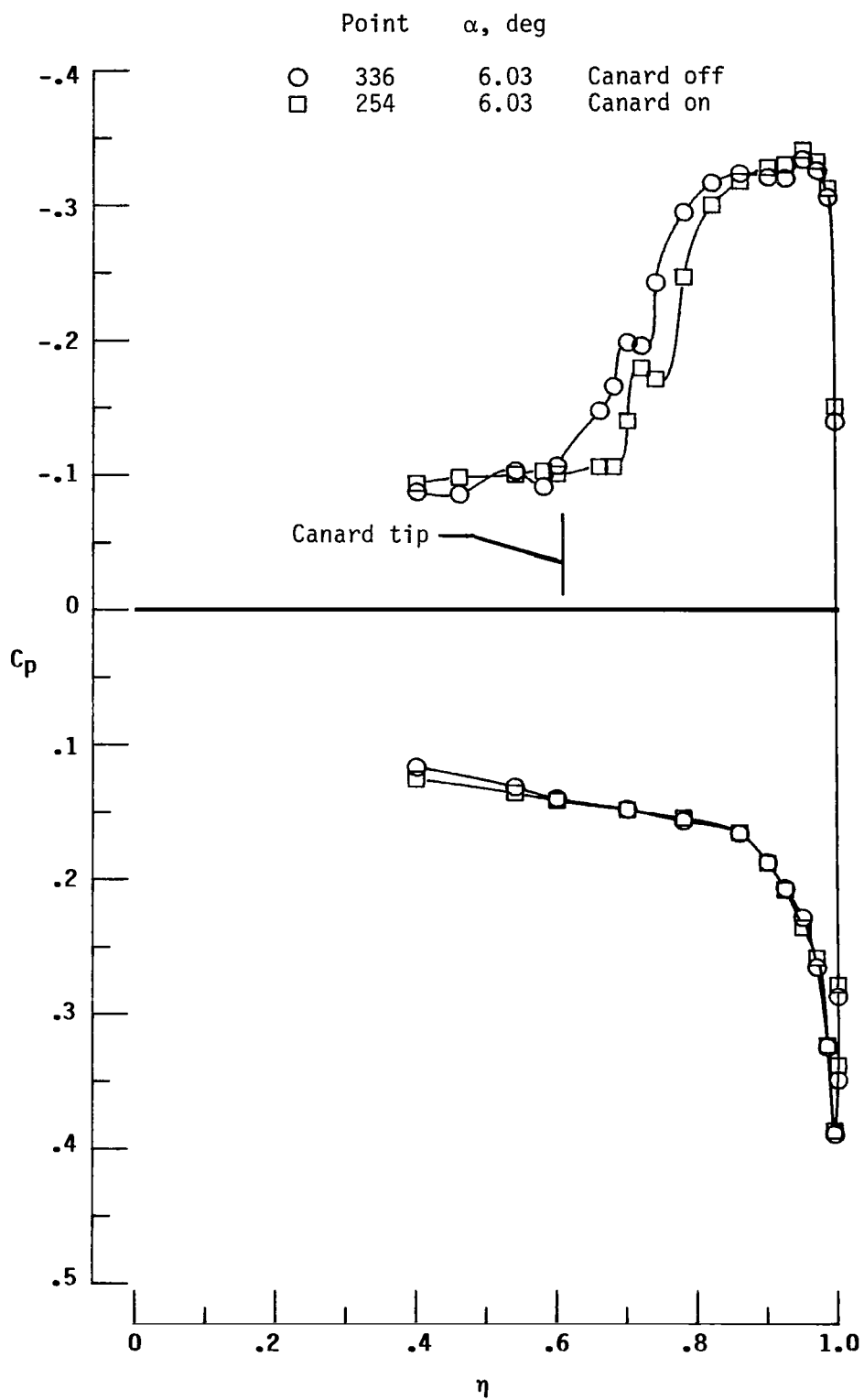
(c) $\alpha \approx 9^\circ$.

Figure 15.- Concluded.



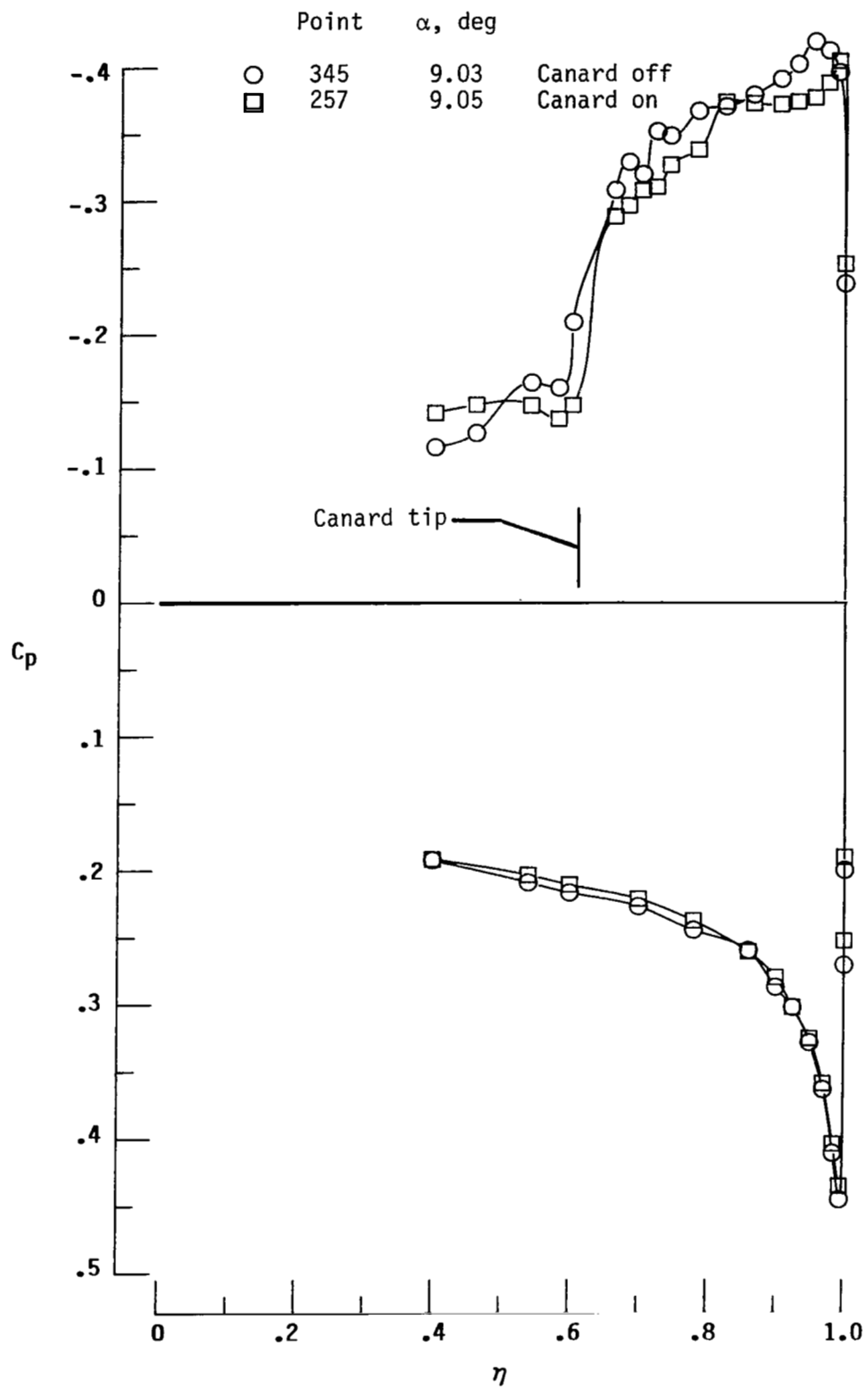
(a) $\alpha \approx 2^\circ$.

Figure 16.- Canard influence on flat wing-body (nose 1) pressure distributions. $x/l = 0.55$; $M = 1.62$.



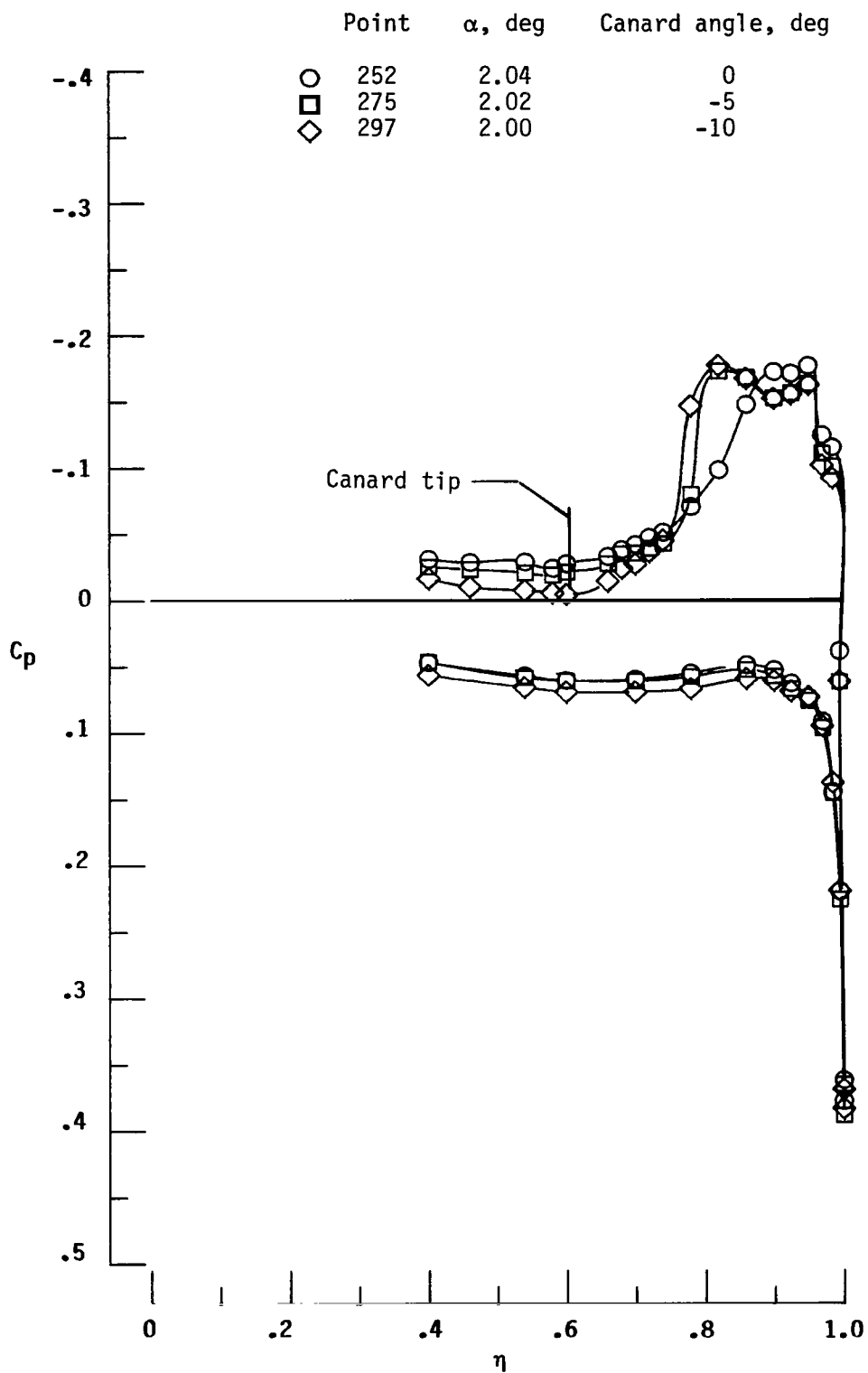
(b) $\alpha \approx 6^\circ$.

Figure 16.- Continued.



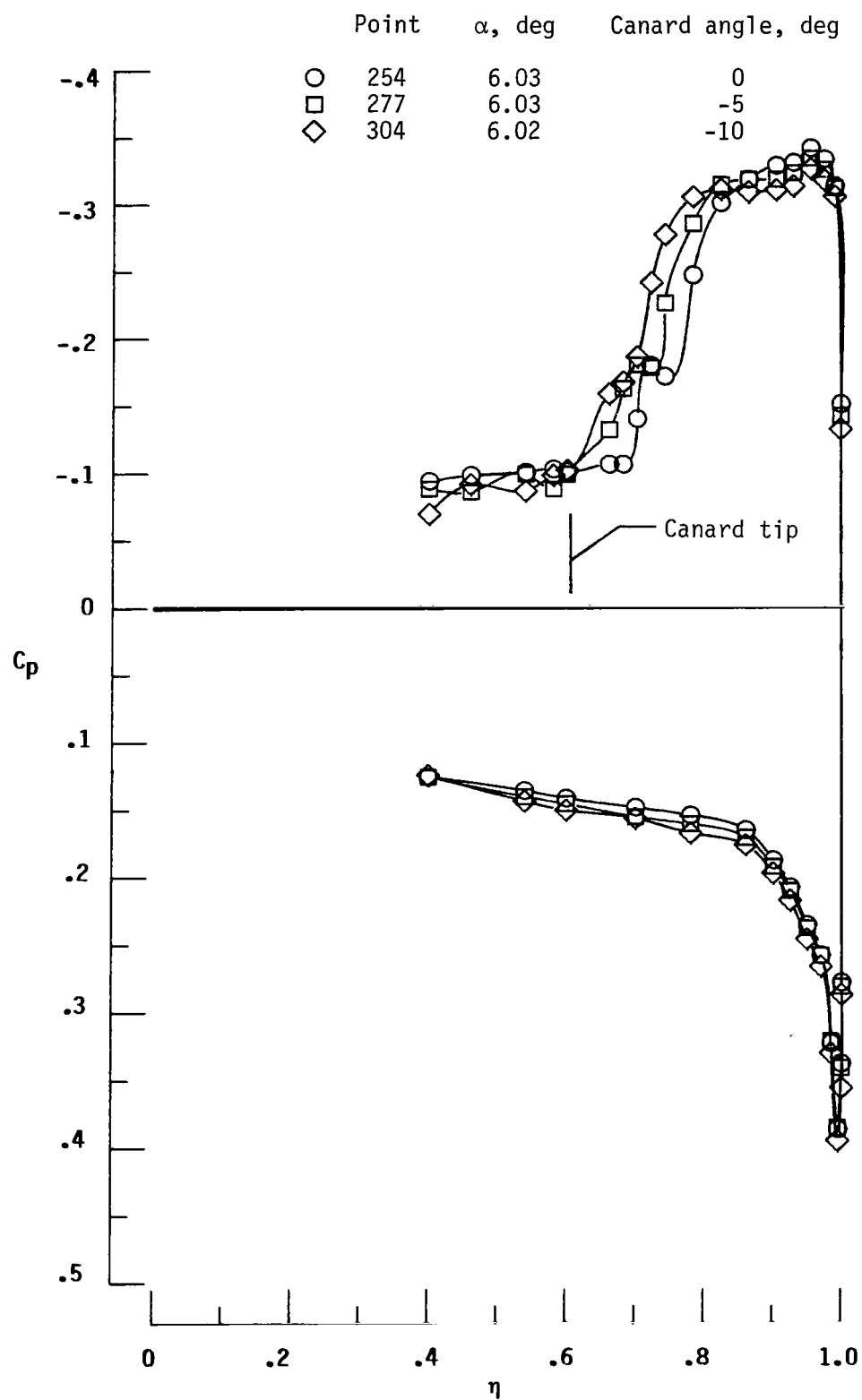
(c) $\alpha \approx 9^\circ$.

Figure 16.- Concluded.



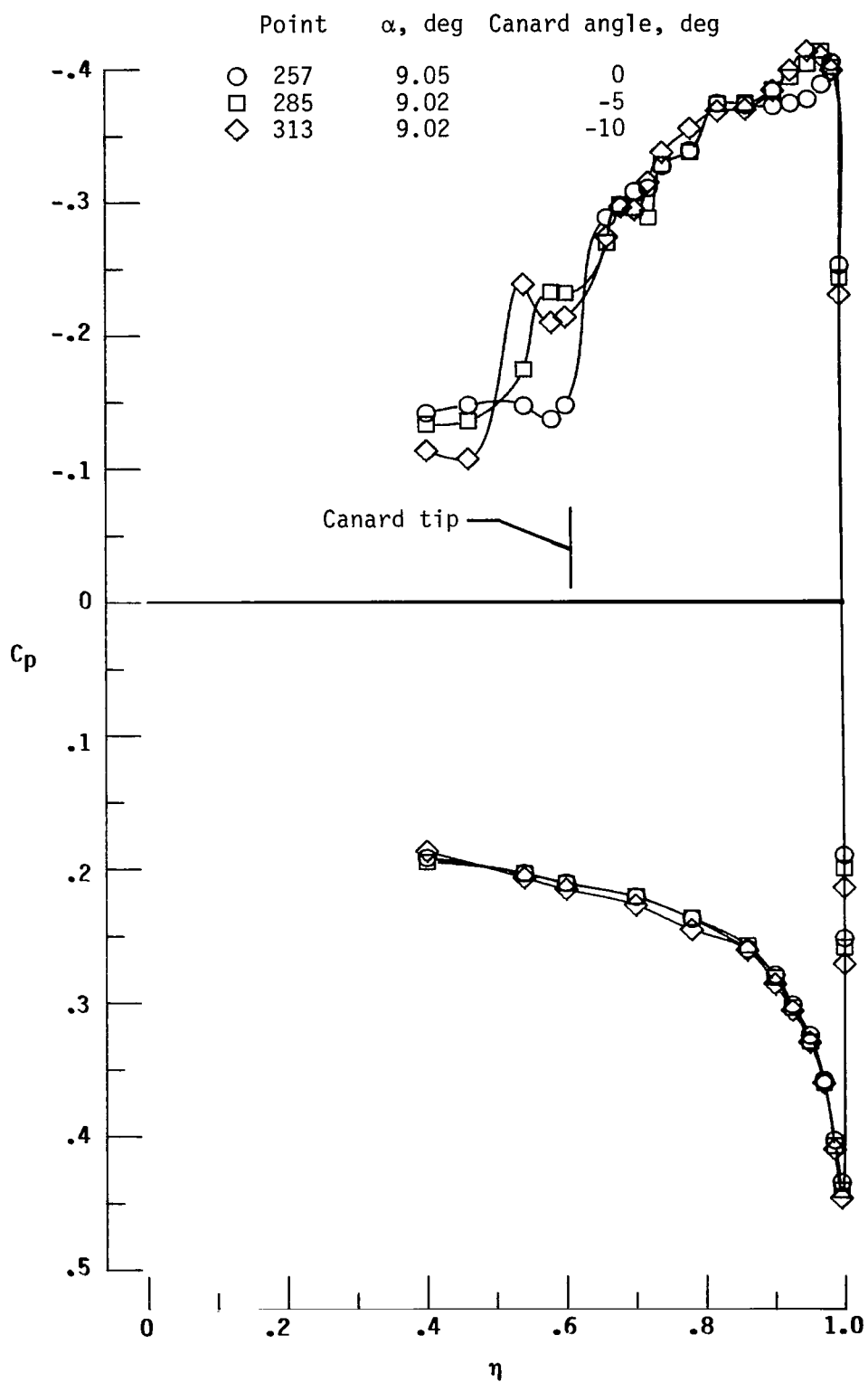
(a) $\alpha \approx 2^\circ$.

Figure 17.- Effect of canard incidence angle on flat-wing pressure distributions. $\delta_c = 0^\circ$; $x/\lambda = 0.55$; $M = 1.62$.



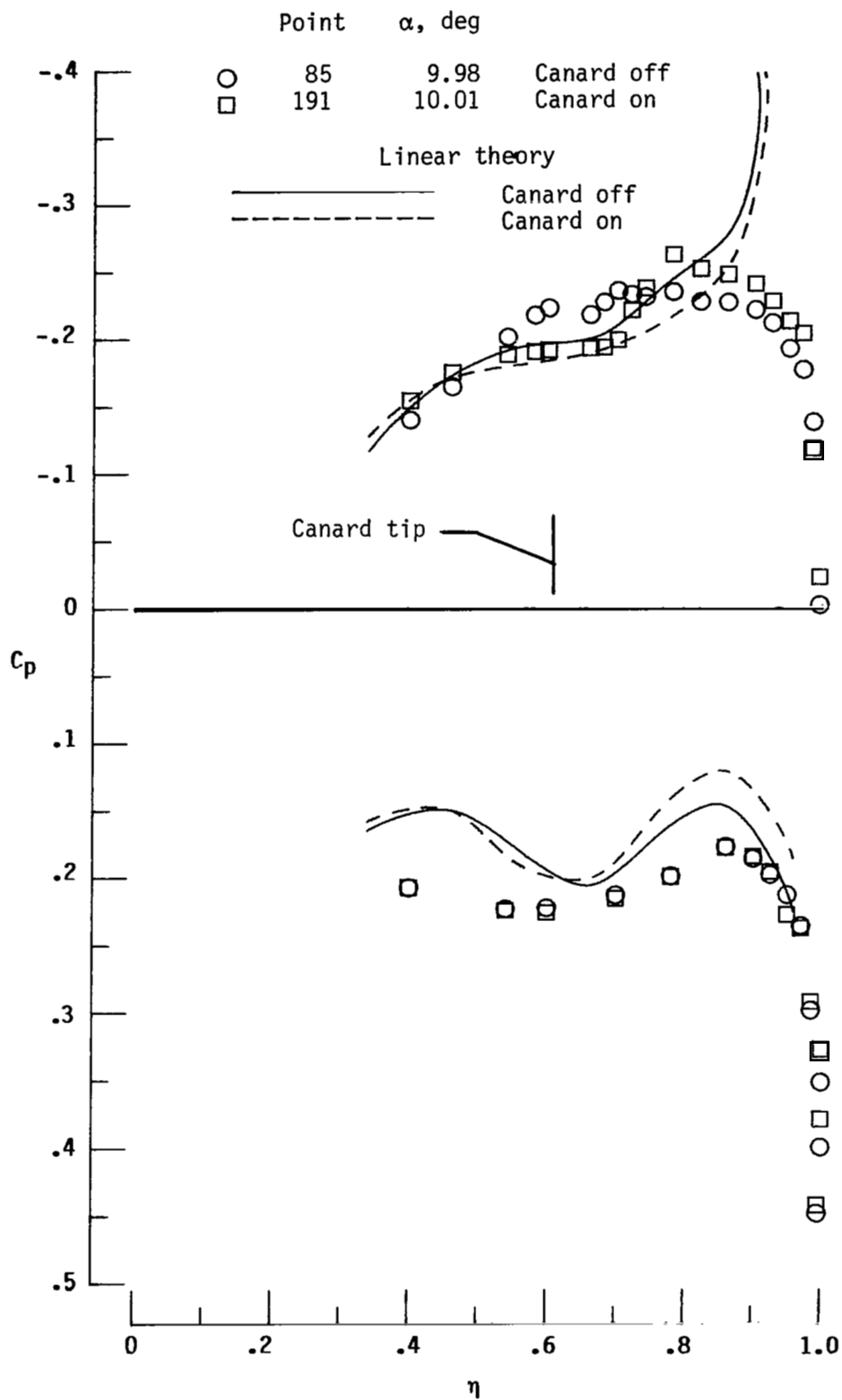
(b) $\alpha \approx 6^\circ$.

Figure 17.- Continued.



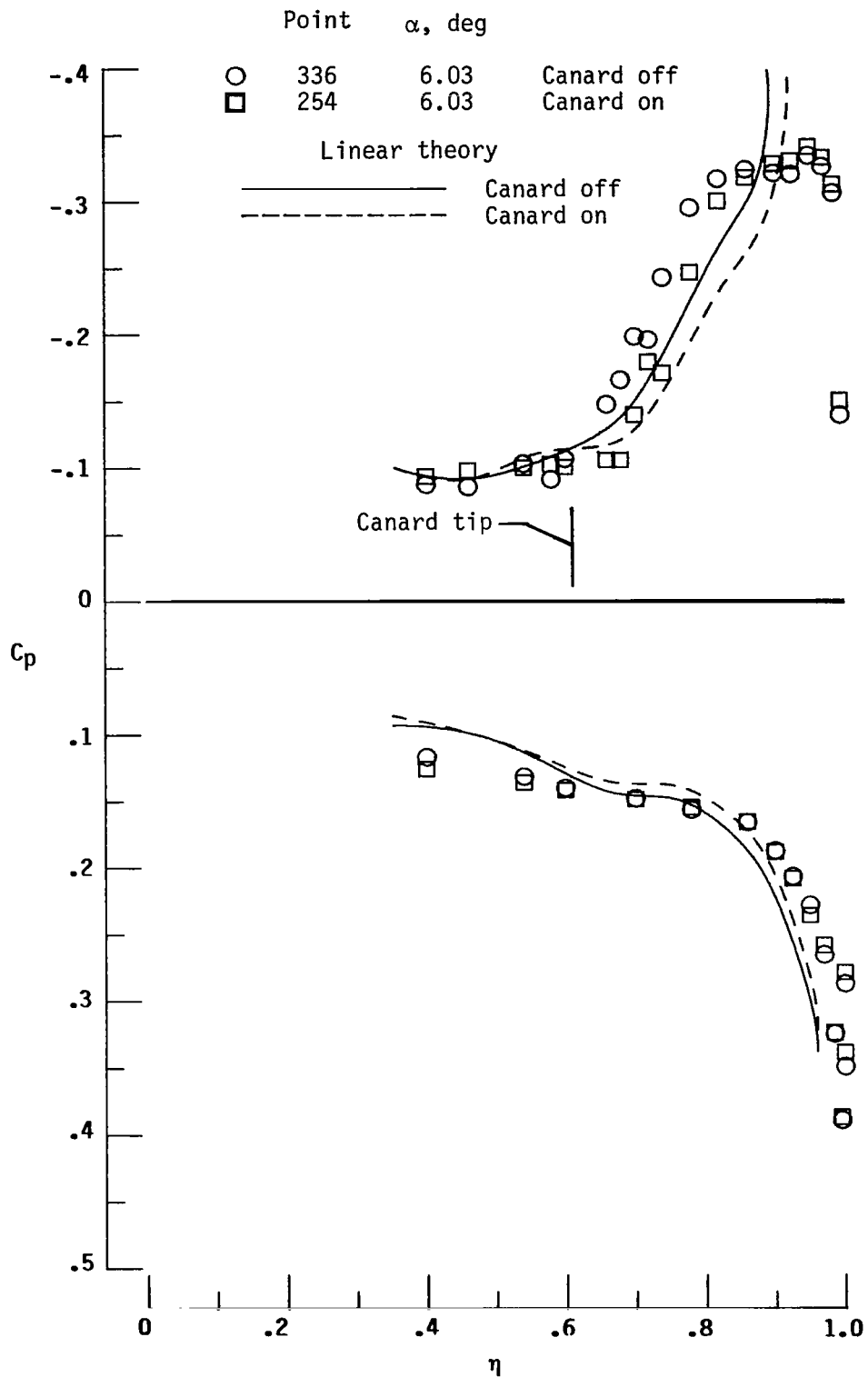
(c) $\alpha \approx 9^\circ$.

Figure 17.- Concluded.



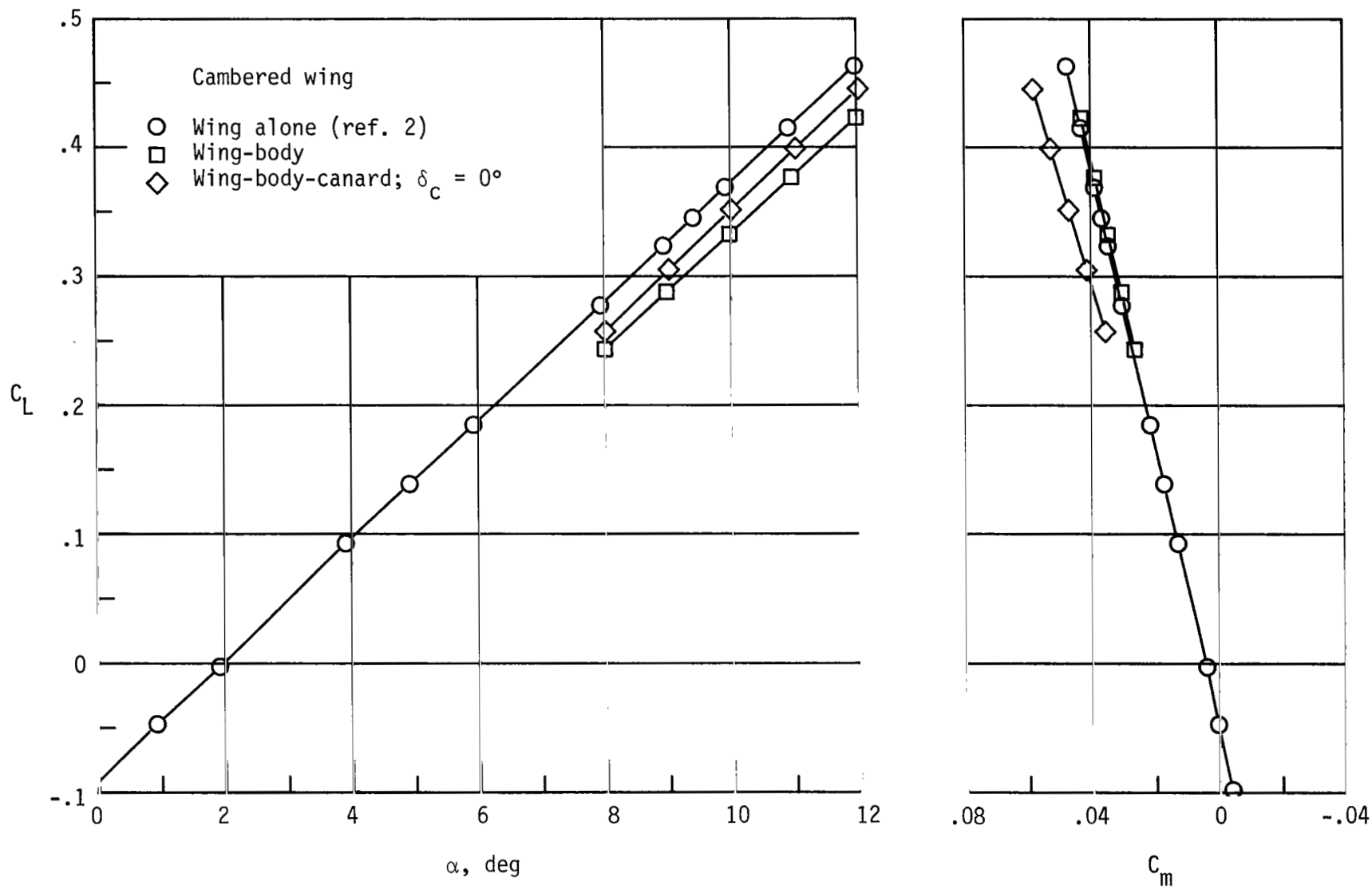
(a) Cambered wing-body model (nose 1). $\alpha \approx 10^\circ$.

Figure 18.- Comparison of linear theory and experimental pressure data for canard on and canard off. $x/l = 0.55$; $M = 1.62$.



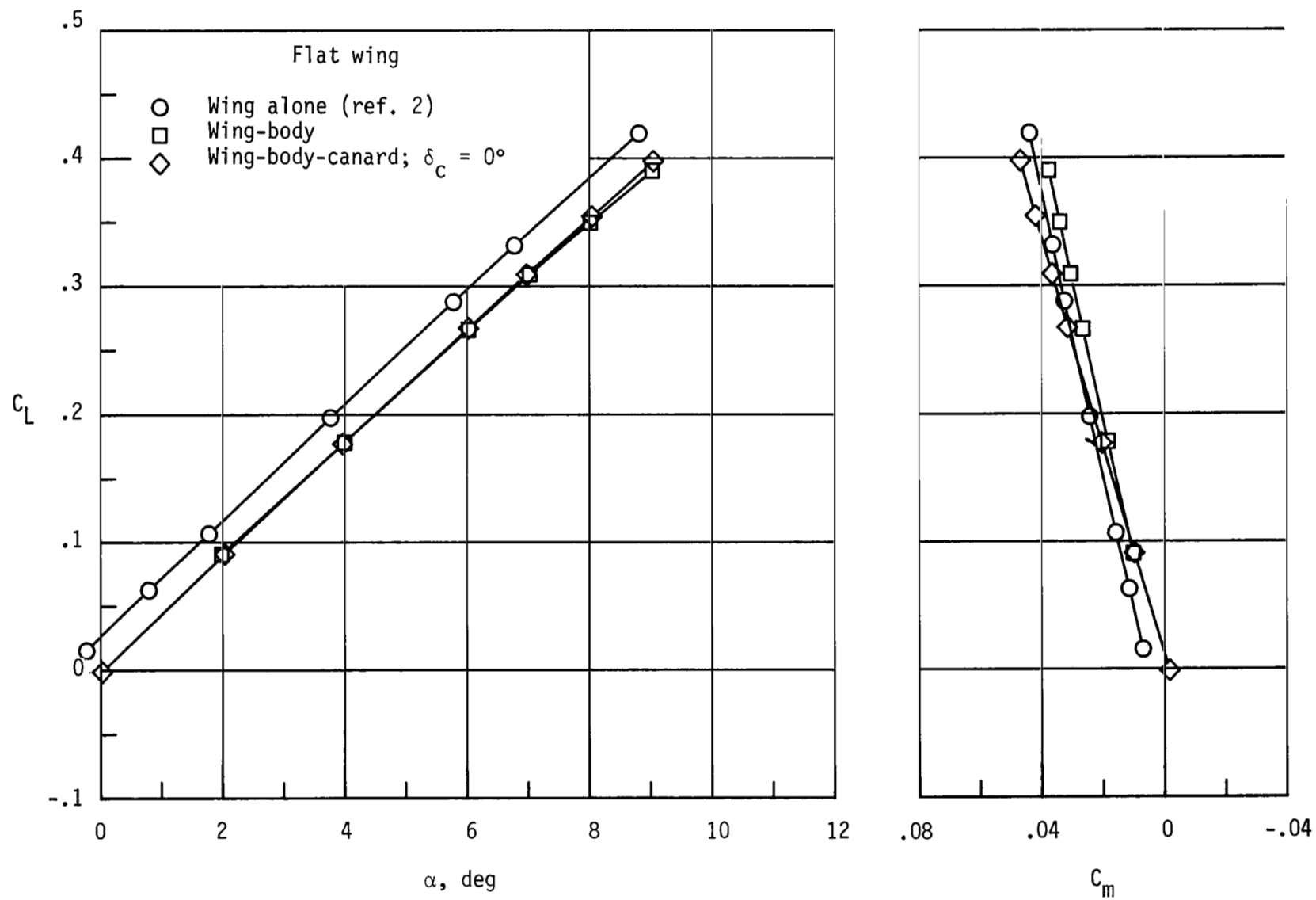
(b) Flat wing-body model (nose 1). $\alpha \approx 6^\circ$.

Figure 18.- Concluded.



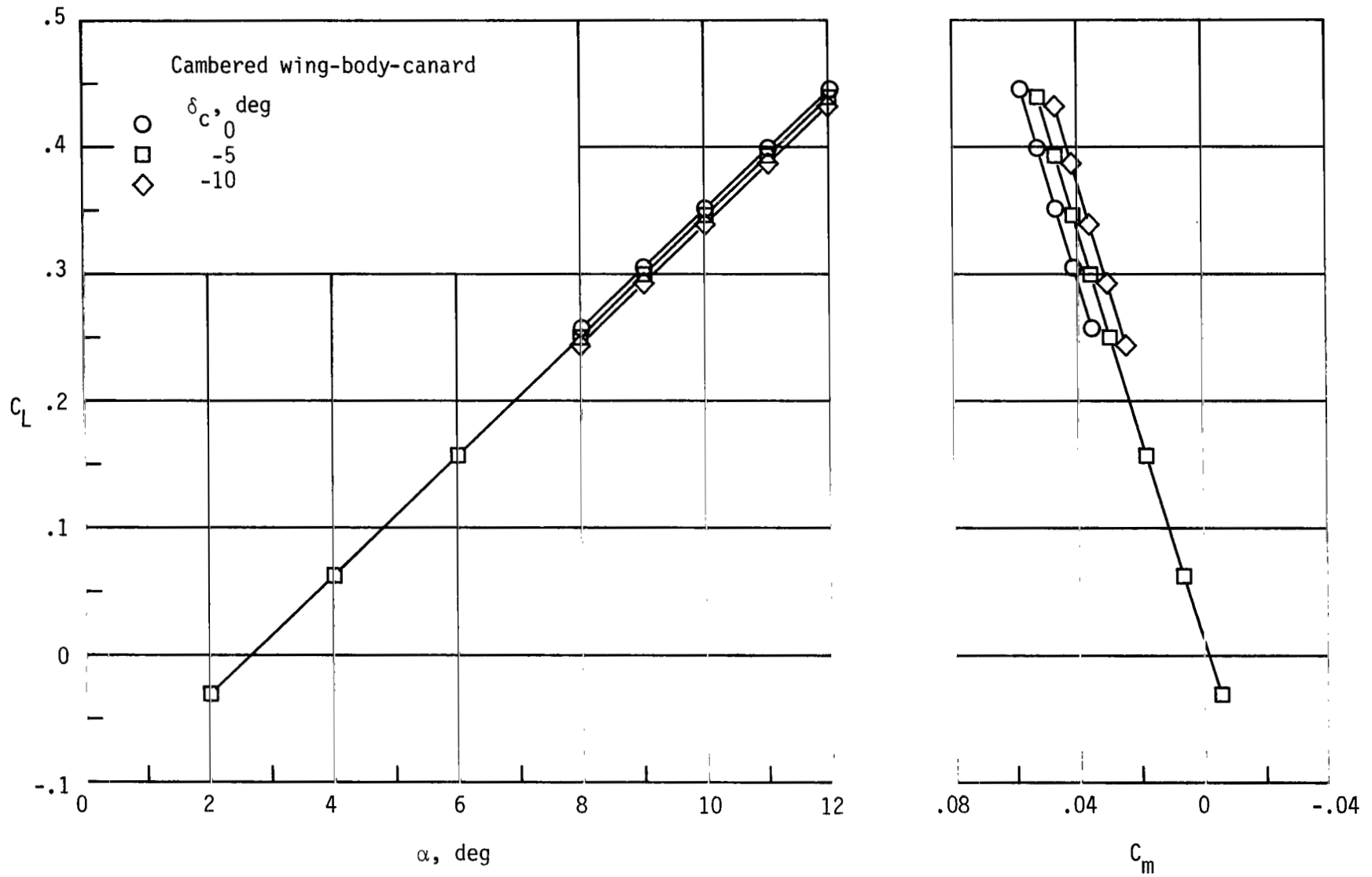
(a) Cambered-wing configurations.

Figure 19.- Effect of body and canards on experimental lift and pitching-moment data at $M = 1.62$.



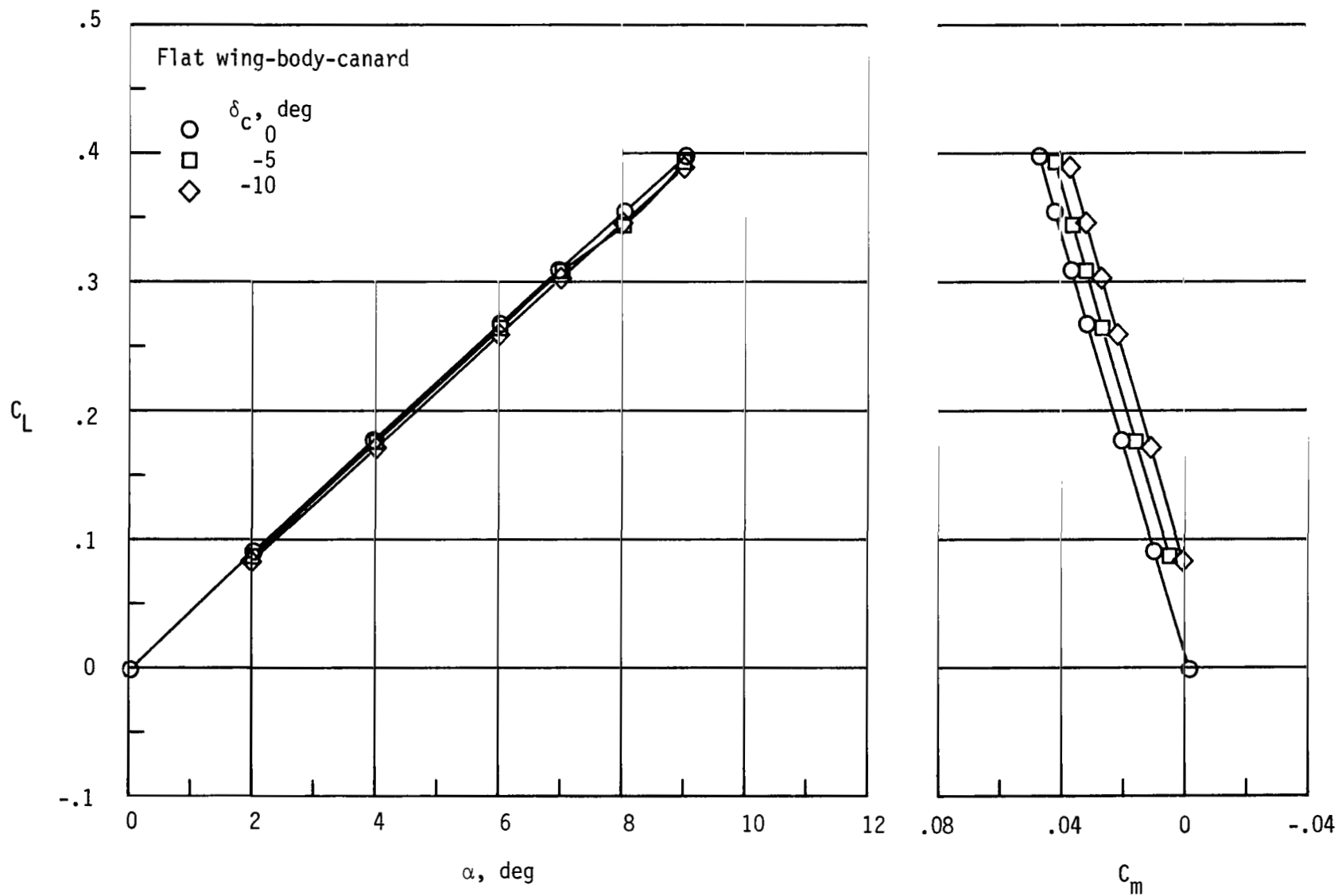
(b) Flat-wing configurations.

Figure 19.- Concluded.



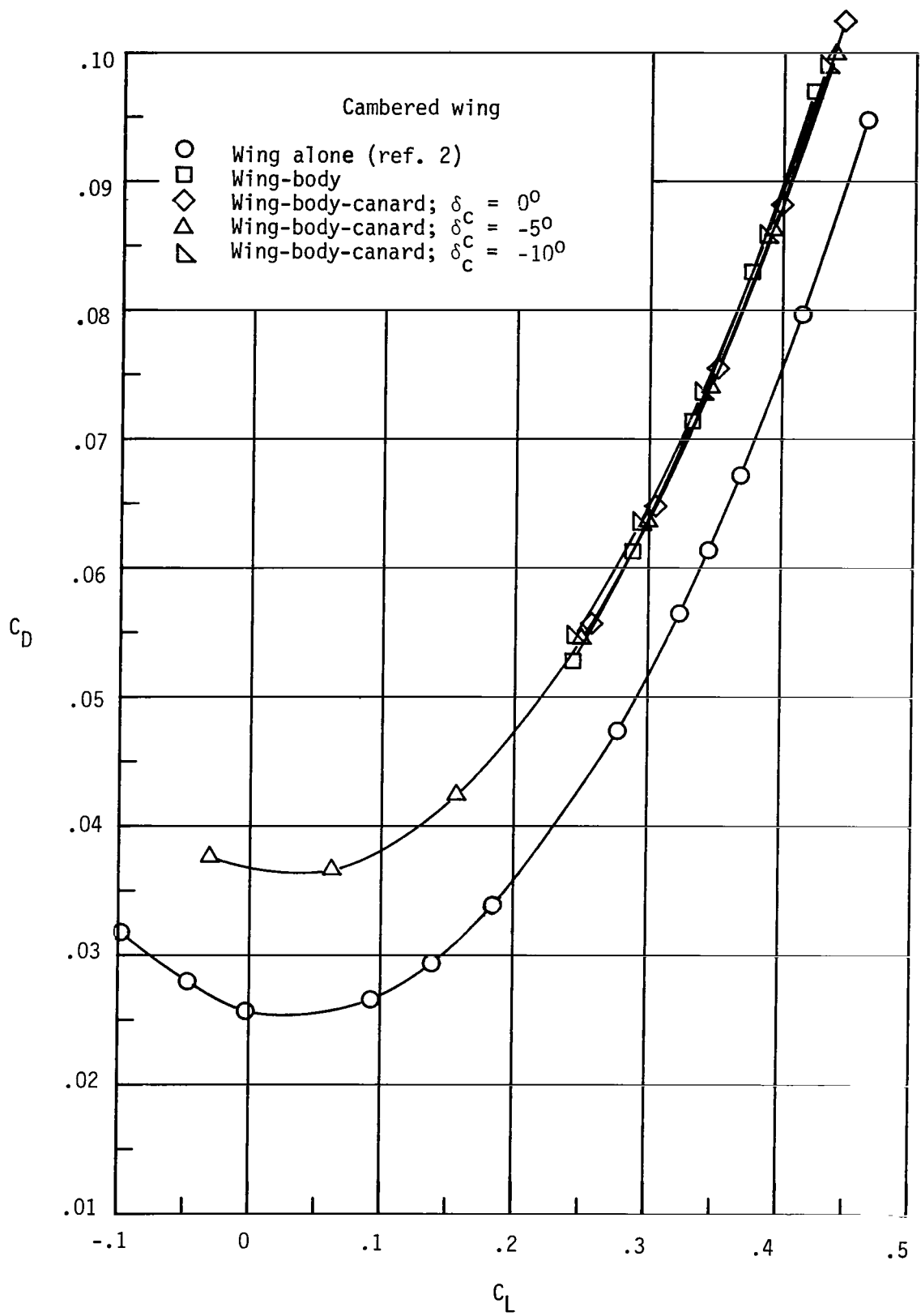
(a) Cambered-wing configurations.

Figure 20.- Effect of canard incidence angle on experimental lift and pitching-moment data at $M = 1.62$.



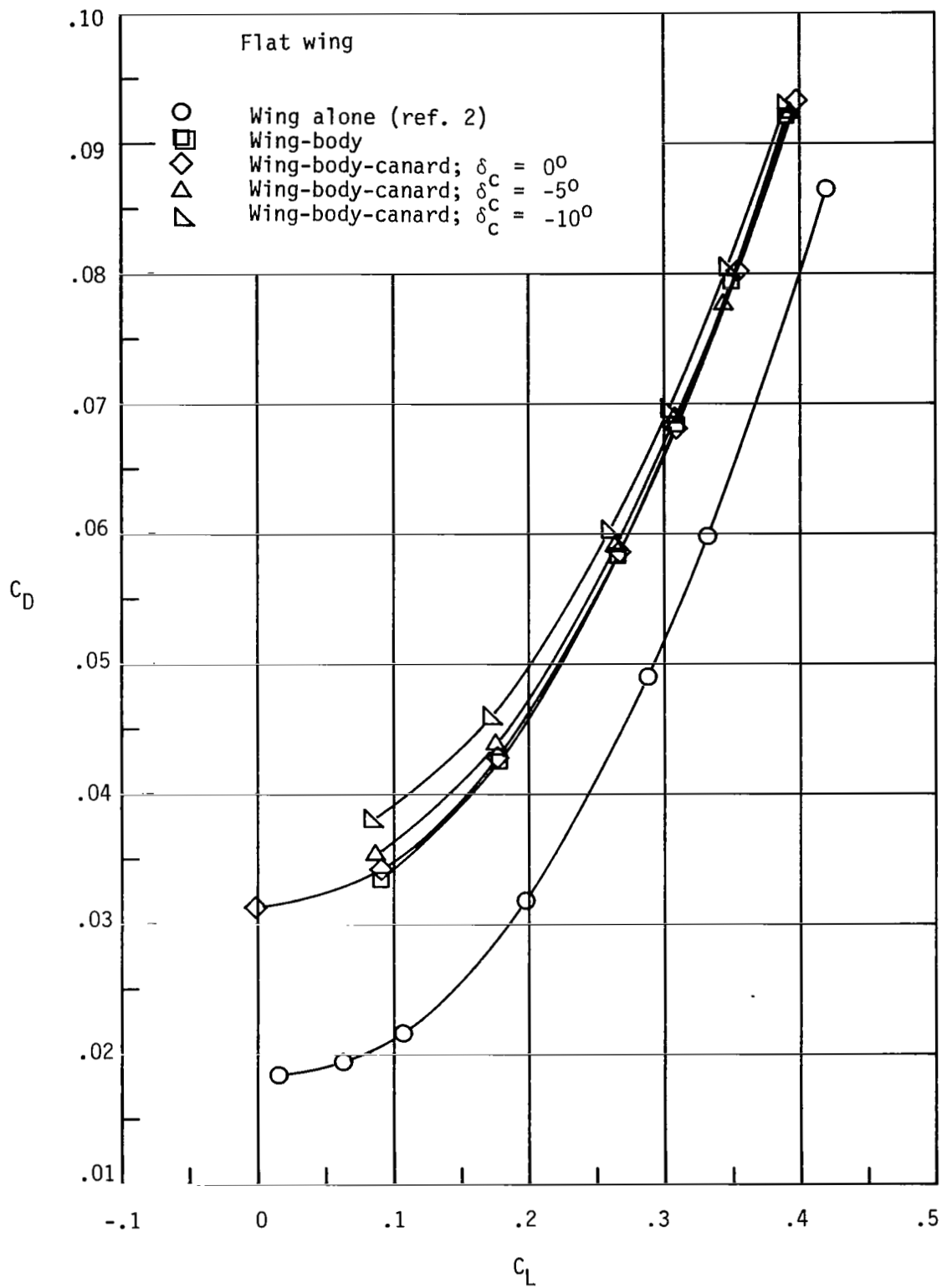
(b) Flat-wing configurations.

Figure 20.- Concluded.



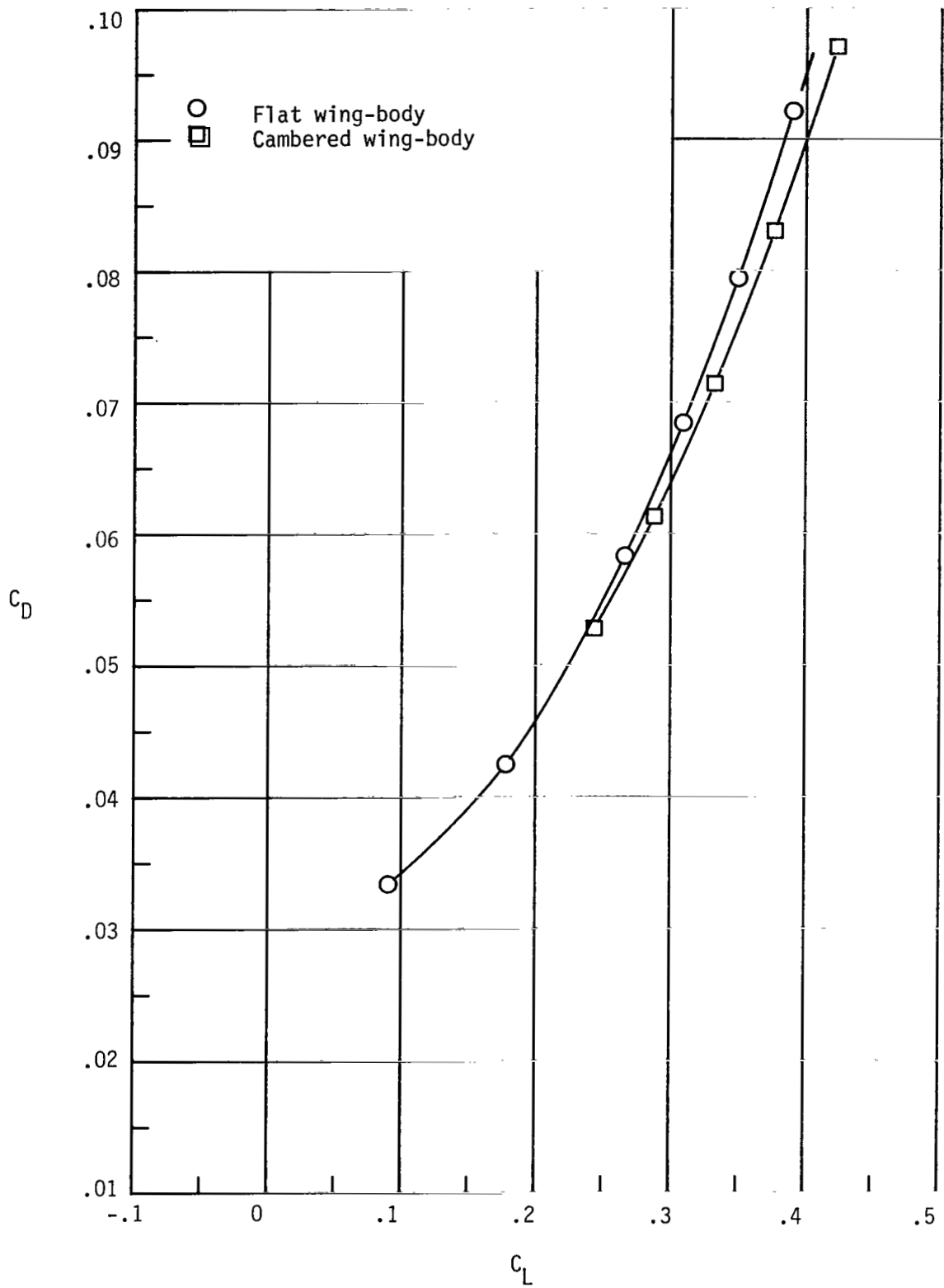
(a) Cambered-wing configurations.

Figure 21.- Summary of experimental drag polars at $M = 1.62$.



(b) Flat-wing configurations.

Figure 21.- Continued.



(c) Comparison of cambered wing-body and flat wing-body models.

Figure 21.- Concluded.

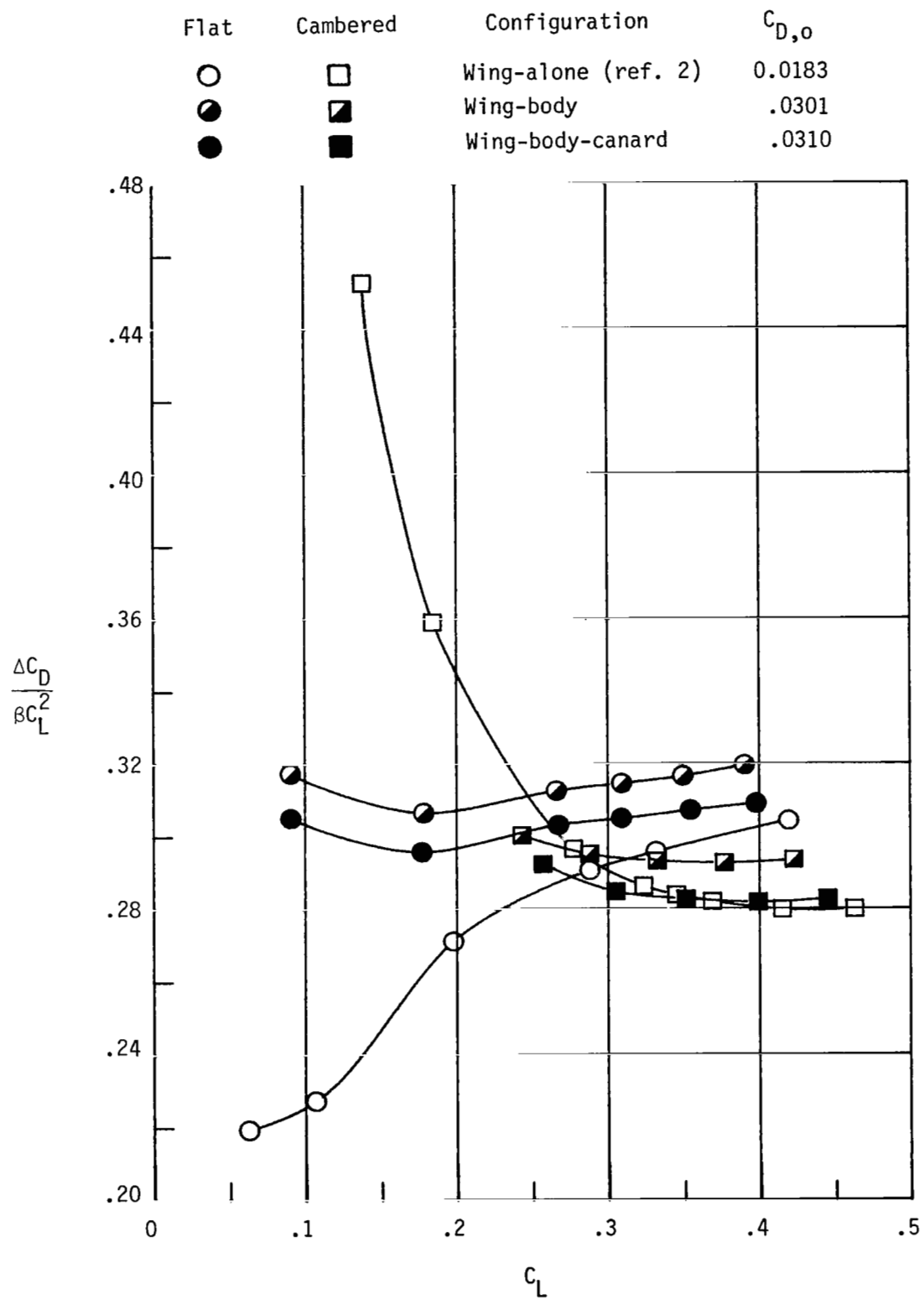
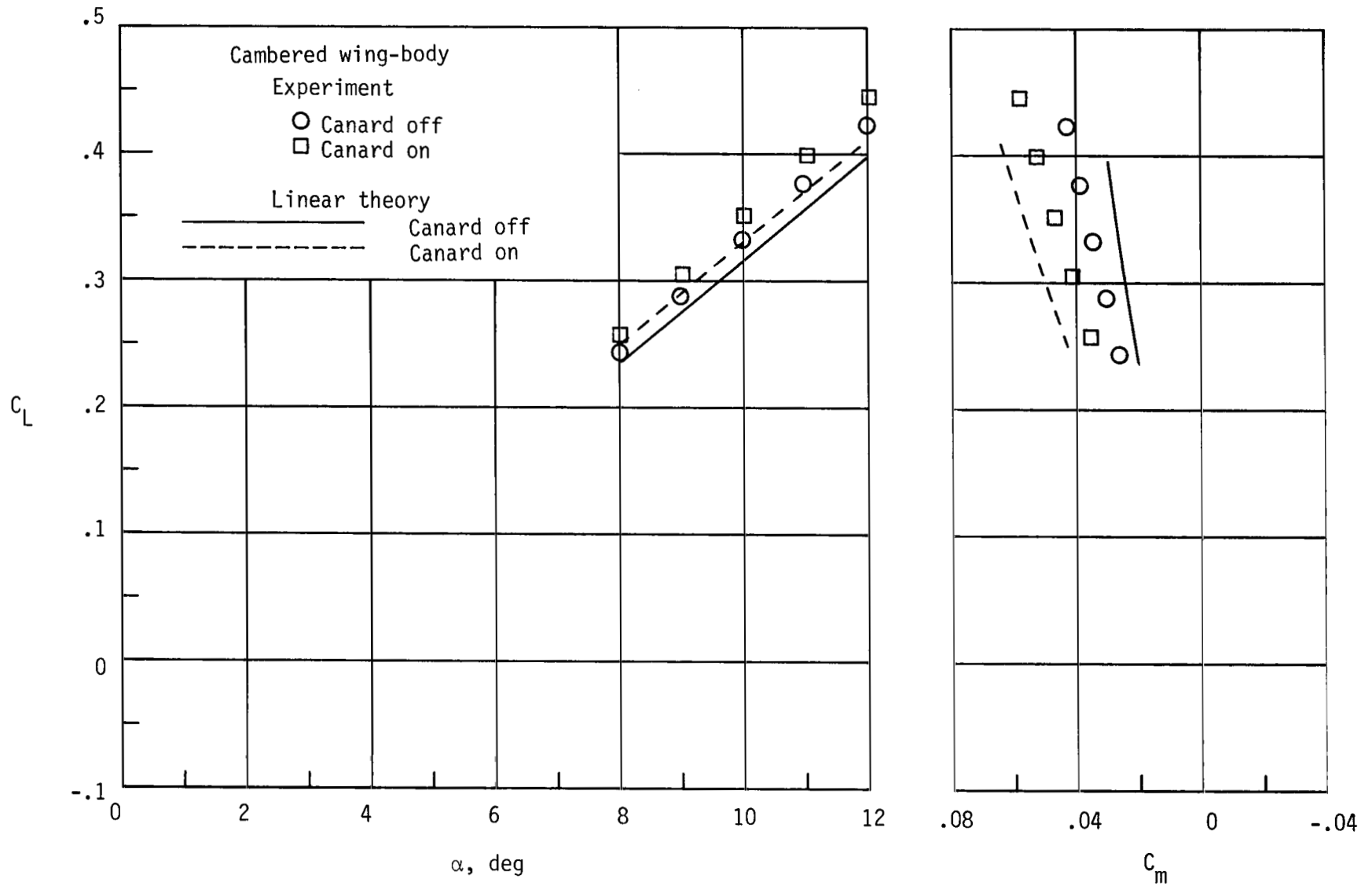
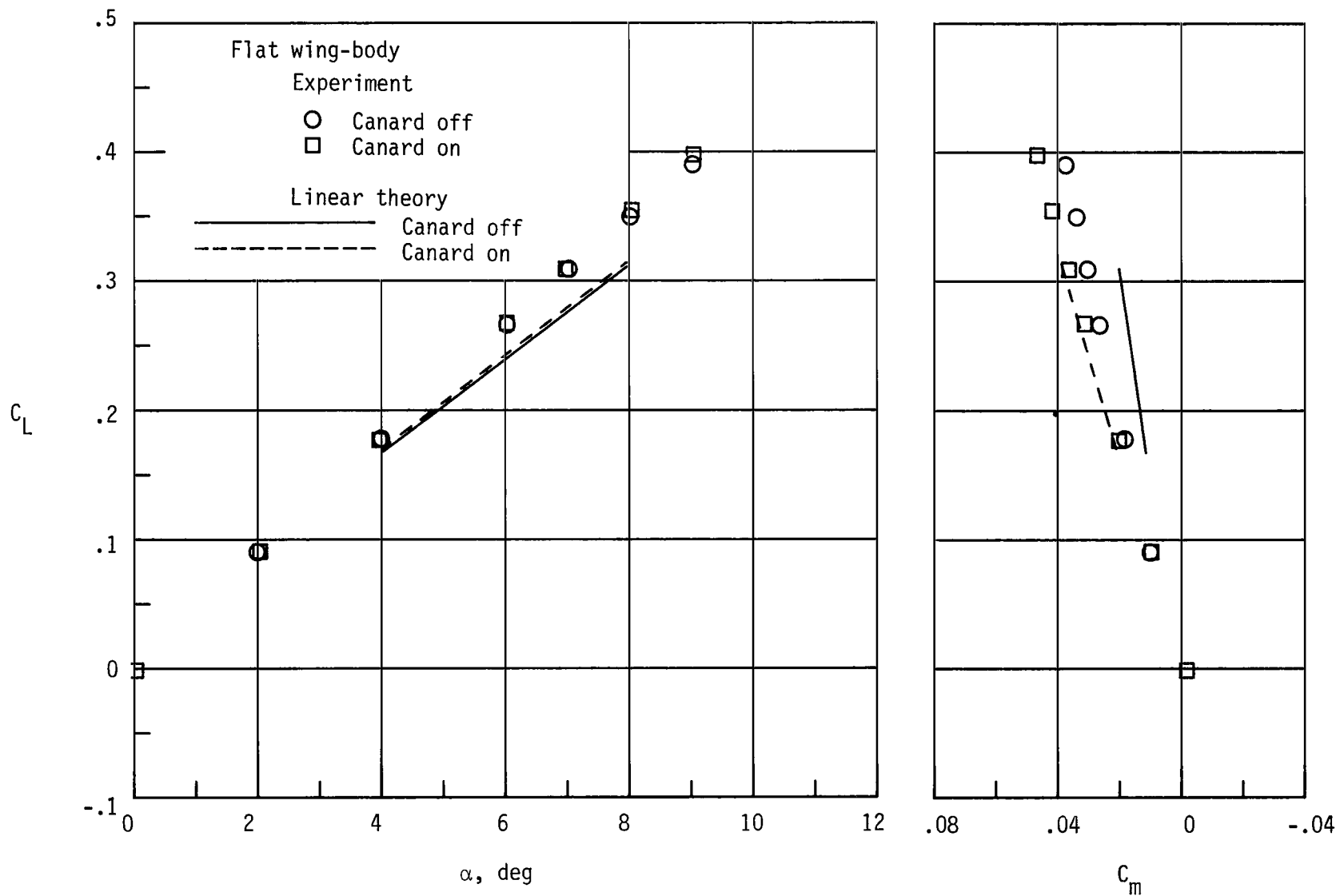


Figure 22.- Assessment of lifting efficiency of cambered-wing and flat-wing configurations.



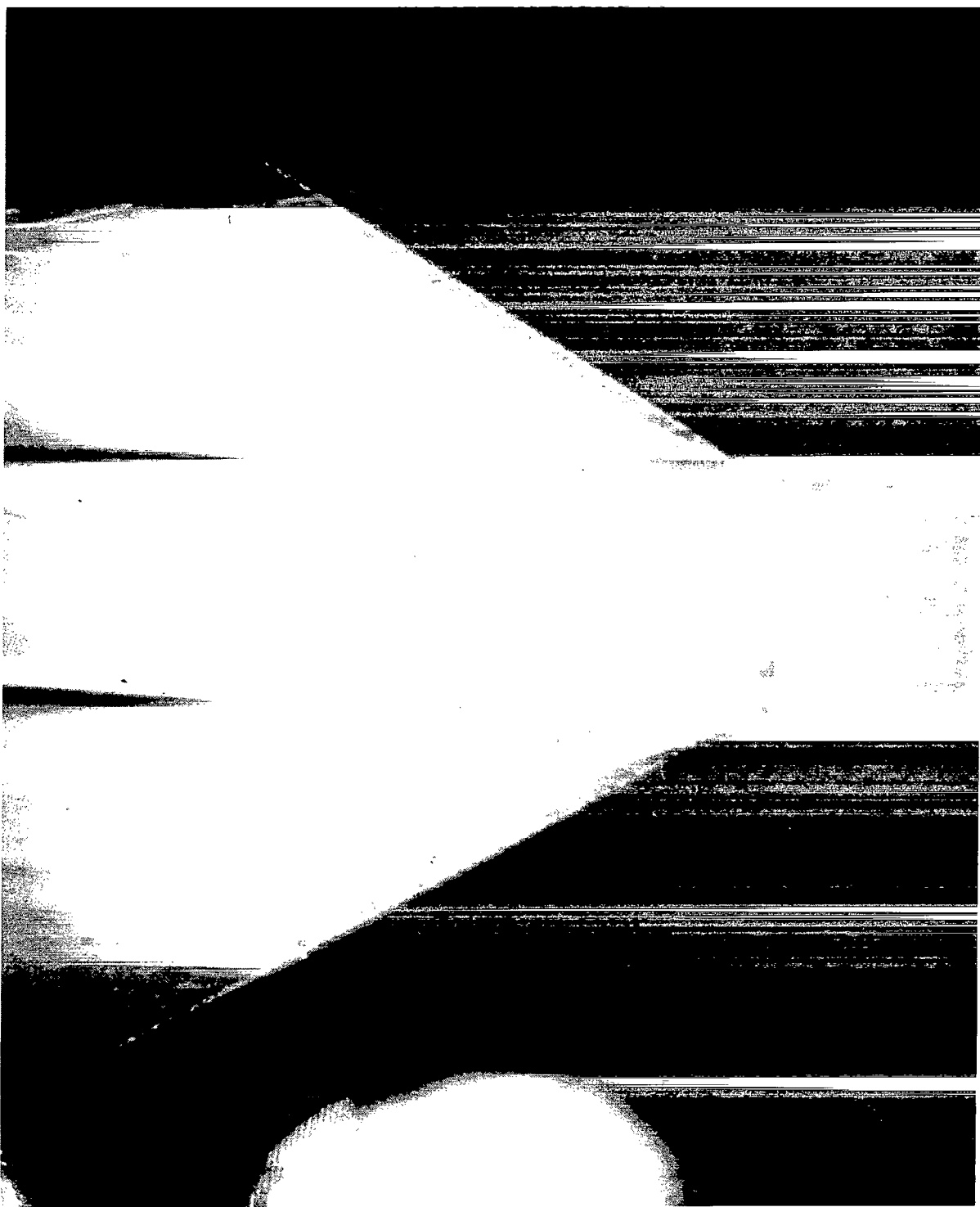
(a) Cambered wing-body model.

Figure 23.- Comparison of data for linear theory and experimental lift and pitching moment for canard on and canard off at $M = 1.62$.



(b) Flat wing-body model.

Figure 23.- Concluded.



L-83-150

(a) Cambered wing-body model (nose 1). $\alpha \approx 10^\circ$.

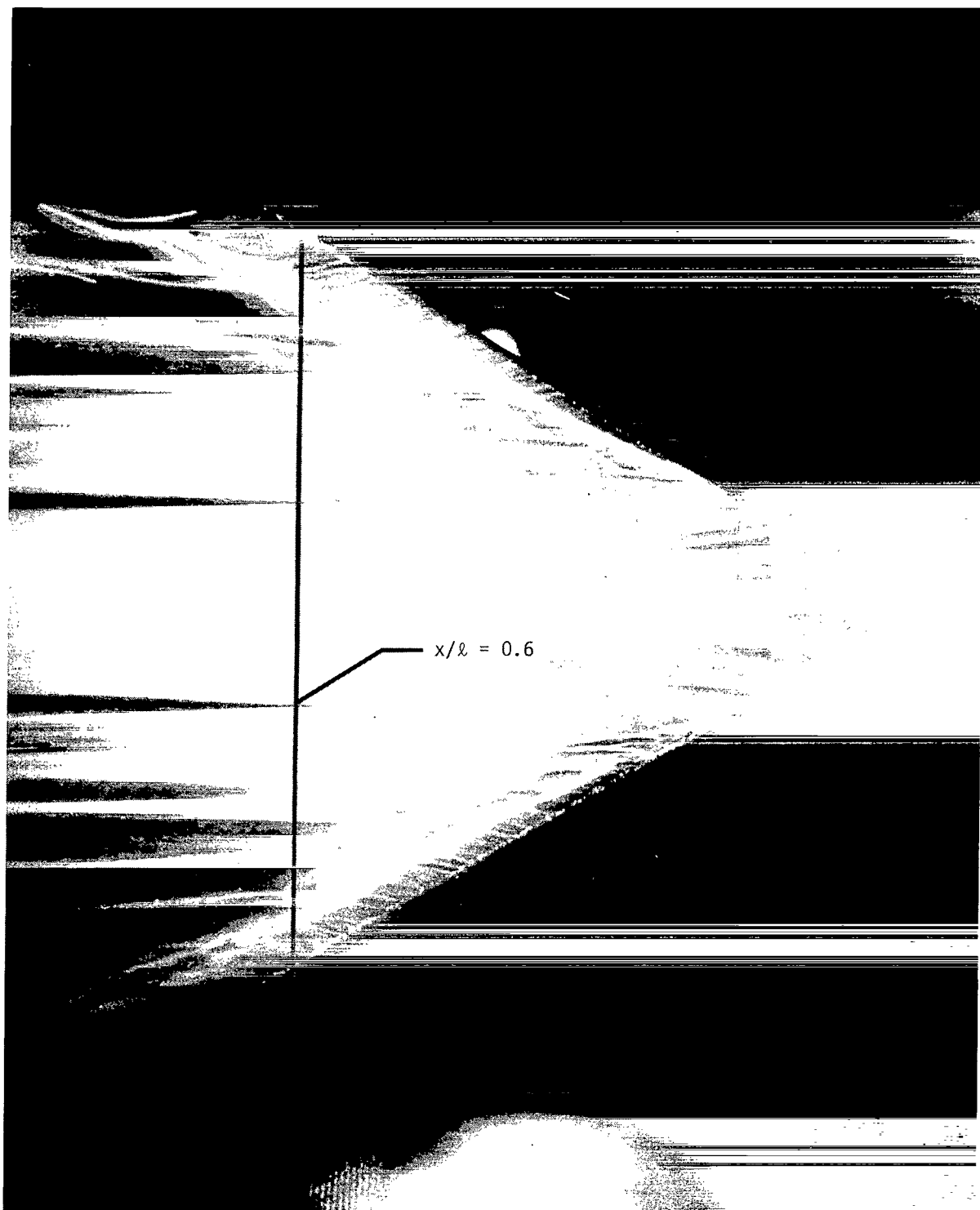
Figure 24.- Photographs of oil flow on upper surface.



L-83-151

(b) Cambered wing-body-canard model (nose 1). $\delta_c = 0^\circ$; $\alpha \approx 10^\circ$.

Figure 24.- Continued.



L-83-152

(c) Flat wing-body model (nose 1). $\alpha \approx 6^\circ$.

Figure 24.- Continued.



L-83-153

(d) Flat wing-body-canard model (nose 1). $\delta_c = 0^\circ$; $\alpha \approx 6^\circ$.

Figure 24.- Concluded.

APPENDIX A

PRESSURE DATA

Pressure data for the configurations tested are given in this appendix. The pressure coefficients for each angle of attack are presented at constant longitudinal stations as a function of the spanwise-location parameter ($\eta = 1.000$ is the leading edge) and also along rays for constant η . Data are presented for the cambered wing in points 15 to 194 and for the flat wing in points 252 to 345. Pressure data were not taken at points 111, 113, and 189 for the cambered wing, or at points 249, 250, 258 to 262, and 280 for the flat wing. Repeat data were taken of several points.

Note that the reference conditions for point 279 were apparently in error, and they have been adjusted to the average values during the particular angle of attack cut. Both the original and adjusted values are contained in this table. The adjusted values were used for plotting.

TABLE AI.- CAMBERED WING-BODY CONFIGURATION

(a) With nose 2

RUN 1	POINT 15	MACH 1.62	ALPHA 8.100	BETA 0.0	Q(PSF) 463.1	H0(PSF) 1103.7	P(PSF) 252.1	RE/FT(X10-6) 2.034	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.1579	16.20	9.7411	1.000	0.3486	
10.80	3.7873	0.540	-0.1606						
10.80	4.3484	0.620	-0.1710		17.40	6.1018	0.540	-0.1264	0.1592
10.80	4.7692	0.680	-0.1746		17.40	7.0058	0.620	-0.1507	0.1582
10.80	4.9095	0.700		0.1641	17.40	8.1358	0.720	-0.1367	0.1407
10.80	5.0498	0.720	-0.1691		17.40	9.7177	0.860	-0.1328	0.0909
10.80	6.0317	0.860	-0.1830		17.40	11.2997	1.000	0.3633	
10.80	6.4876	0.925	-0.1835	0.1224					
10.80	6.8032	0.970	-0.1531		19.80	6.9435	0.540	-0.1278	0.1415
10.80	6.9084	0.985	-0.0553	0.1714	19.80	7.9721	0.620	-0.1454	0.1395
10.80	7.0136	1.000	0.3139		19.80	9.2580	0.720	-0.1411	0.1197
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.0983	0.1785	ETA	Y	X	CP-UP	CP-LOW
13.20	3.9432	0.460	-0.1225		0.54	3.7873	10.800	-0.1606	
13.20	4.6290	0.540	-0.1438	0.1921	0.54	4.6290	13.200	-0.1438	0.1921
13.20	4.9719	0.580	-0.1592		0.54	5.2602	15.000	-0.1360	
13.20	5.3148	0.620	-0.1631	0.1922	0.54	6.1018	17.400	-0.1264	0.1592
13.20	5.6576	0.660	-0.1607		0.54	6.9435	19.800	-0.1278	0.1415
13.20	5.8291	0.680	-0.1571						
13.20	6.0005	0.700	-0.1553	0.1738					
13.20	6.1720	0.720	-0.1483		0.62	4.3484	10.800	-0.1710	
13.20	6.3434	0.740	-0.1500		0.62	5.3148	13.200	-0.1631	0.1922
13.20	6.6863	0.780	-0.1720	0.1619	0.62	6.0395	15.000	-0.1567	
13.20	7.0292	0.820	-0.1715		0.62	7.0058	17.400	-0.1507	0.1582
13.20	7.3721	0.860	-0.1680	0.1243	0.62	7.9721	19.800	-0.1454	0.1197
13.20	7.7150	0.900	-0.1654	0.1274					
13.20	7.9293	0.925	-0.1529	0.1339	0.72	5.0498	10.800	-0.1691	
13.20	8.1436	0.950	-0.1527	0.1292	0.72	6.1720	13.200	-0.1483	
13.20	8.3150	0.970	-0.1259	0.1579	0.72	7.0136	15.000	-0.1540	
13.20	8.4436	0.985	-0.0576	0.1852	0.72	8.1358	17.400	-0.1367	0.1407
13.20	8.5293	0.995	0.0751	0.3875	0.72	9.2580	19.800	-0.1411	0.1197
13.20	8.5722	1.000	0.3815	0.4201					
					0.86	6.0317	10.800	-0.1830	
15.00	5.2602	0.540	-0.1360		0.86	7.3721	13.200	-0.1680	0.1243
15.00	6.0395	0.620	-0.1567		0.86	8.3774	15.000	-0.1540	
15.00	7.0136	0.720	-0.1540		0.86	9.7177	17.400	-0.1328	0.0909
15.00	8.3774	0.860	-0.1540						
15.00	9.7411	1.000	0.3253		1.00	7.0136	10.800	0.3139	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3815	0.4201
					1.00	9.7411	15.000	0.3253	
BASE PRESSURES					1.00	10.5204	16.200	0.3486	
PORT	CP				1.00	11.2997	17.400	0.3633	
1	-0.3893				ETA	Y	X	CP-UP	CP-LOW
2	-0.3052								
3	-0.2954								
4	-0.2469								

TABLE AI.- Continued

(a) Continued

RUN 1	POINT 16	MACH 1.62	ALPHA 9.000	BETA 0.0	Q(PSF) 458.7	H0(PSF) 1093.4	P(PSF) 249.7	RE/FT(X10-6) 2.015		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1753	16.20	9.7411	1.000	0.3151		
10.80	3.7873	0.540	-0.1832							
10.80	4.3484	0.620	-0.1970		17.40	6.1018	0.540	-0.1374	0.1708	
10.80	4.7692	0.680	-0.1956		17.40	7.0058	0.620	-0.1789	0.1707	
10.80	4.9095	0.700		0.1836	17.40	8.1358	0.720	-0.1821	0.1527	
10.80	5.0498	0.720	-0.1975		17.40	9.7177	0.860	-0.1682	0.1097	
10.80	6.0317	0.860	-0.2119		17.40	11.2997	1.000	0.3327		
10.80	6.4876	0.925	-0.2103	0.1613						
10.80	6.8032	0.970	-0.1678		19.80	6.9435	0.540	-0.1368	0.1521	
10.80	6.9084	0.985	-0.0887	0.2408	19.80	7.9721	0.620	-0.1748	0.1512	
10.80	7.0136	1.000	0.2940		19.80	9.2580	0.720	-0.1823	0.1298	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1160	0.1882						
13.20	3.9432	0.460	-0.1355		CP-LOW					
13.20	4.6290	0.540	-0.1698	0.2002						
13.20	4.9719	0.580	-0.1874							
13.20	5.3148	0.620	-0.1923	0.2023						
13.20	5.6576	0.660	-0.1892							
13.20	5.8291	0.680	-0.1869							
13.20	6.0005	0.700	-0.1856	0.1875						
13.20	6.1720	0.720	-0.1937							
13.20	6.3434	0.740	-0.2001							
13.20	6.6863	0.780	-0.2136	0.1753						
13.20	7.0292	0.820	-0.2048							
13.20	7.3721	0.860	-0.1977	0.1447						
13.20	7.7150	0.900	-0.1934	0.1537						
13.20	7.9293	0.925	-0.1908	0.1599						
13.20	8.1436	0.950	-0.1747	0.1745						
13.20	8.3150	0.970	-0.1472	0.2009						
13.20	8.4436	0.985	-0.1069	0.2400						
13.20	8.5293	0.995	0.0308	0.4223						
13.20	8.5722	1.000	0.3663	0.4083						
15.00	5.2602	0.540	-0.1599		0.86	6.0317	10.800	-0.2119		
15.00	6.0395	0.620	-0.1858		0.86	7.3721	13.200	-0.1977	0.1447	
15.00	7.0136	0.720	-0.1977		0.86	8.3774	15.000	-0.1856		
15.00	8.3774	0.860	-0.1856		0.86	9.7177	17.400	-0.1682	0.1097	
15.00	9.7411	1.000	0.2957							
X	Y	ETA	CP-UP	CP-LOW	1.00 <td>7.0136</td> <td>10.800</td> <td>0.2940</td> <td></td>	7.0136	10.800	0.2940		
					1.00	8.5722	13.200	0.3663	0.4083	
					1.00	9.7411	15.000	0.2957		
					1.00	10.5204	16.200	0.3151		
					1.00	11.2997	17.400	0.3327		
BASE PRESSURES					ETA	Y	X	CP-UP	CP-LOW	
PORT	CP									
1	-0.4072									
2	-0.2946									
3	-0.2993									
4	-0.2499									

TABLE A1.- Continued

(a) Continued

RUN 1	POINT 17	MACH 1.62	ALPHA 10.000	BETA 0.0	Q(PSF) 455.9	H0(PSF) 1086.6	P(PSF) 248.2	RE/FT(X10-6) 2.003		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1979	16.20	9.7411	1.000	0.2865		
10.80	3.7873	0.540	-0.2075							
10.80	4.3484	0.620	-0.2254		17.40	6.1018	0.540	-0.1569	0.2024	
10.80	4.7692	0.680	-0.2268		17.40	7.0058	0.620	-0.2133	0.2017	
10.80	4.9095	0.700		0.2093	17.40	8.1358	0.720	-0.2157	0.1828	
10.80	5.0498	0.720	-0.2504		17.40	9.7177	0.860	-0.1975	0.1444	
10.80	6.0317	0.860	-0.2412		17.40	11.2997	1.000	0.3215		
10.80	6.4876	0.925	-0.2348	0.1970						
10.80	6.8032	0.970	-0.1944		19.80	6.9435	0.540	-0.1582	0.1819	
10.80	6.9084	0.985	-0.1451	0.2926	19.80	7.9721	0.620	-0.2124	0.1796	
10.80	7.0136	1.000	0.2567		19.80	9.2580	0.720	-0.2180	0.1601	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1295	0.2167						
13.20	3.9432	0.460	-0.1573		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1938	0.2264	0.54	3.7873	10.800	-0.2075		
13.20	4.9719	0.580	-0.2202		0.54	4.6290	13.200	-0.1938	0.2264	
13.20	5.3148	0.620	-0.2245	0.2272	0.54	5.2602	15.000	-0.1808		
13.20	5.6576	0.660	-0.2239		0.54	6.1018	17.400	-0.1569	0.2024	
13.20	5.8291	0.680	-0.2267		0.54	6.9435	19.800	-0.1582	0.1819	
13.20	6.0005	0.700	-0.2339	0.2148						
13.20	6.1720	0.720	-0.2438		0.62	4.3484	10.800	-0.2254		
13.20	6.3434	0.740	-0.2449		0.62	5.3148	13.200	-0.2245	0.2272	
13.20	6.6863	0.780	-0.2407	0.2042	0.62	6.0395	15.000	-0.2157		
13.20	7.0292	0.820	-0.2311		0.62	7.0058	17.400	-0.2133	0.2017	
13.20	7.3721	0.860	-0.2251	0.1879	0.62	7.9721	19.800	-0.2124	0.1601	
13.20	7.7150	0.900	-0.2274	0.1921						
13.20	7.9293	0.925	-0.2193	0.2042	0.72	5.0498	10.800	-0.2504		
13.20	8.1436	0.950	-0.1996	0.2206	0.72	6.1720	13.200	-0.2438		
13.20	8.3150	0.970	-0.1851	0.2525	0.72	7.0136	15.000	-0.2354		
13.20	8.4436	0.985	-0.1487	0.3077	0.72	8.1358	17.400	-0.2157	0.1828	
13.20	8.5293	0.995	-0.0070	0.4500	0.72	9.2580	19.800	-0.2180	0.1601	
13.20	8.5722	1.000	0.3415	0.3991						
					0.86	6.0317	10.800	-0.2412		
15.00	5.2602	0.540	-0.1808		0.86	7.3721	13.200	-0.2251	0.1879	
15.00	6.0395	0.620	-0.2157		0.86	8.3774	15.000	-0.2133		
15.00	7.0136	0.720	-0.2354		0.86	9.7177	17.400	-0.1975	0.1444	
15.00	8.3774	0.860	-0.2133							
15.00	9.7411	1.000	0.2679		1.00	7.0136	10.800	0.2567		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3415	0.3991	
					1.00	9.7411	15.000	0.2679		
BASE PRESSURES					1.00	10.5204	16.200	0.2865		
					1.00	11.2997	17.400	0.3215		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4123									
2	-0.3026									
3	-0.3079									
4	-0.2530									

TABLE AI.- Continued

(a) Continued

RUN 2	POINT 36	MACH 1.62	ALPHA 8.020	BETA 0.0	Q(PSF) 453.7	H0(PSF) 1081.4	P(PSF) 247.0	RE/FT(X10-6) 1.993		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1500	16.20	9.7411	1.000	0.3458		
10.80	3.7873	0.540	-0.1605							
10.80	4.3484	0.620	-0.1728		17.40	6.1018	0.540	-0.1265	0.1525	
10.80	4.7692	0.680	-0.1739		17.40	7.0058	0.620	-0.1453	0.1479	
10.80	4.9095	0.700		0.1571	17.40	8.1358	0.720	-0.1359	0.1300	
10.80	5.0498	0.720	-0.1662		17.40	9.7177	0.860	-0.1294	0.0834	
10.80	6.0317	0.860	-0.1805		17.40	11.2997	1.000	0.3639		
10.80	6.4876	0.925	-0.1721	0.1089						
10.80	6.8032	0.970	-0.1491		19.80	6.9435	0.540	-0.1204	0.1360	
10.80	6.9084	0.985	-0.0492	0.1533	19.80	7.9721	0.620	-0.1416	0.1338	
10.80	7.0136	1.000	0.3144		19.80	9.2580	0.720	-0.1386	0.1118	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1002	0.1691						
13.20	3.9432	0.460	-0.1171		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1479	0.1805	0.54	3.7873	10.800	-0.1605		
13.20	4.9719	0.580	-0.1621		0.54	4.6290	13.200	-0.1479	0.1805	
13.20	5.3148	0.620	-0.1764	0.1819	0.54	5.2602	15.000	-0.1359		
13.20	5.6576	0.660	-0.1730		0.54	6.1018	17.400	-0.1265	0.1525	
13.20	5.8291	0.680	-0.1549		0.54	6.9435	19.800	-0.1204	0.1360	
13.20	6.0005	0.700	-0.1556	0.1646						
13.20	6.1720	0.720	-0.1361		0.62	4.3484	10.800	-0.1728		
13.20	6.3434	0.740	-0.1494		0.62	5.3148	13.200	-0.1764	0.1819	
13.20	6.6863	0.780	-0.1560	0.1505	0.62	6.0395	15.000	-0.1541		
13.20	7.0292	0.820	-0.1742		0.62	7.0058	17.400	-0.1453	0.1479	
13.20	7.3721	0.860	-0.1658	0.1183	0.62	7.9721	19.800	-0.1416	0.1118	
13.20	7.7150	0.900	-0.1606	0.1211						
13.20	7.9293	0.925	-0.1560	0.1160	0.72	5.0498	10.800	-0.1662		
13.20	8.1436	0.950	-0.1521	0.1229	0.72	6.1720	13.200	-0.1361		
13.20	8.3150	0.970	-0.1320	0.1386	0.72	7.0136	15.000	-0.1488		
13.20	8.4436	0.985	-0.0480	0.1711	0.72	8.1358	17.400	-0.1359	0.1300	
13.20	8.5293	0.995	0.0707	0.3751	0.72	9.2580	19.800	-0.1386	0.1118	
13.20	8.5722	1.000	0.3816	0.4135						
					0.86	6.0317	10.800	-0.1805		
15.00	5.2602	0.540	-0.1359		0.86	7.3721	13.200	-0.1658	0.1183	
15.00	6.0395	0.620	-0.1541		0.86	8.3774	15.000	-0.1545		
15.00	7.0136	0.720	-0.1488		0.86	9.7177	17.400	-0.1294	0.0834	
15.00	8.3774	0.860	-0.1545							
15.00	9.7411	1.000	0.3223		1.00	7.0136	10.800	0.3144		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3816	0.4135	
					1.00	9.7411	15.000	0.3223		
BASE PRESSURES					1.00	10.5204	16.200	0.3458		
PORT	CP				1.00	11.2997	17.400	0.3639		
1	-0.3814				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3127									
3	-0.2972									
4	-0.2469									

TABLE AI.- Continued

(a) Continued

RUN 2	POINT 37	MACH 1.62	ALPHA 8.020	BETA 0.0	Q(PSF) 453.7	H0(PSF) 1081.4	P(PSF) 247.0	RE/FT(X10-6) 1.993		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1492	16.20	9.7411	1.000	0.3449		
10.80	3.7873	0.540	-0.1609							
10.80	4.3484	0.620	-0.1762		17.40	6.1018	0.540	-0.1277	0.1522	
10.80	4.7692	0.680	-0.1726		17.40	7.0058	0.620	-0.1546	0.1498	
10.80	4.9095	0.700		0.1587	17.40	8.1358	0.720	-0.1399	0.1318	
10.80	5.0498	0.720	-0.1659		17.40	9.7177	0.860	-0.1297	0.0817	
10.80	6.0317	0.860	-0.1790		17.40	11.2997	1.000	0.3595		
10.80	6.4876	0.925	-0.1720	0.1076						
10.80	6.8032	0.970	-0.1516		19.80	6.9435	0.540	-0.1337	0.1354	
10.80	6.9084	0.985	-0.0635	0.1555	19.80	7.9721	0.620	-0.1443	0.1343	
10.80	7.0136	1.000	0.3182		19.80	9.2580	0.720	-0.1408	0.1112	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1008	0.1680						
13.20	3.9432	0.460	-0.1256		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1448	0.1828	0.54	3.7873	10.800	-0.1609		
13.20	4.9719	0.580	-0.1585		0.54	4.6290	13.200	-0.1448	0.1828	
13.20	5.3148	0.620	-0.1596	0.1795	0.54	5.2602	15.000	-0.1368		
13.20	5.6576	0.660	-0.1581		0.54	6.1018	17.400	-0.1277	0.1522	
13.20	5.8291	0.680	-0.1576		0.54	6.9435	19.800	-0.1337	0.1354	
13.20	6.0005	0.700	-0.1564	0.1650						
13.20	6.1720	0.720	-0.1606		0.62	4.3484	10.800	-0.1762		
13.20	6.3434	0.740	-0.1699		0.62	5.3148	13.200	-0.1596	0.1795	
13.20	6.6863	0.780	-0.1608	0.1500	0.62	6.0395	15.000	-0.1570		
13.20	7.0292	0.820	-0.1708		0.62	7.0058	17.400	-0.1546	0.1498	
13.20	7.3721	0.860	-0.1662	0.1164	0.62	7.9721	19.800	-0.1443	0.1112	
13.20	7.7150	0.900	-0.1558	0.1177						
13.20	7.9293	0.925	-0.1534	0.1198	0.72	5.0498	10.800	-0.1659		
13.20	8.1436	0.950	-0.1454	0.1260	0.72	6.1720	13.200	-0.1606		
13.20	8.3150	0.970	-0.1239	0.1386	0.72	7.0136	15.000	-0.1482		
13.20	8.4436	0.985	-0.0521	0.1708	0.72	8.1358	17.400	-0.1399	0.1318	
13.20	8.5293	0.995	0.0754	0.3757	0.72	9.2580	19.800	-0.1408	0.1112	
13.20	8.5722	1.000	0.3821	0.4112						
					0.86	6.0317	10.800	-0.1790		
15.00	5.2602	0.540	-0.1368		0.86	7.3721	13.200	-0.1662	0.1164	
15.00	6.0395	0.620	-0.1570		0.86	8.3774	15.000	-0.1482		
15.00	7.0136	0.720	-0.1482		0.86	9.7177	17.400	-0.1297	0.0817	
15.00	8.3774	0.860	-0.1482							
15.00	9.7411	1.000	0.3270		1.00	7.0136	10.800	0.3182		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3821	0.4112	
					1.00	9.7411	15.000	0.3270		
BASE PRESSURES					1.00	10.5204	16.200	0.3449		
					1.00	11.2997	17.400	0.3595		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.3837									
2	-0.3106									
3	-0.2972									
4	-0.2474									

TABLE AI.- Continued

(a) Continued

RUN 2	POINT 39	MACH 1.62	ALPHA 10.020	BETA- 0.0	Q(PSF) 453.3	H0(PSF) 1080.3	P(PSF) 246.7	RE/FT(X10-6) 1.991		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1962	16.20	9.7411	1.000	0.3014		
10.80	3.7873	0.540	-0.2075							
10.80	4.3484	0.620	-0.2316		17.40	6.1018	0.540	-0.1631	0.2002	
10.80	4.7692	0.680	-0.2268		17.40	7.0058	0.620	-0.2122	0.1972	
10.80	4.9095	0.700		0.2071	17.40	8.1358	0.720	-0.2079	0.1809	
10.80	5.0498	0.720	-0.2416		17.40	9.7177	0.860	-0.1930	0.1475	
10.80	6.0317	0.860	-0.2396		17.40	11.2997	1.000	0.3268		
10.80	6.4876	0.925	-0.2321	0.1921						
10.80	6.8032	0.970	-0.1911		19.80	6.9435	0.540	-0.1613	0.1834	
10.80	6.9084	0.985	-0.1460	0.2863	19.80	7.9721	0.620	-0.2193	0.1799	
10.80	7.0136	1.000	0.2686		19.80	9.2580	0.720	-0.2159	0.1585	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1273	0.2175						
13.20	3.9432	0.460	-0.1544		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1944	0.2266	0.54	3.7873	10.800	-0.2075		
13.20	4.9719	0.580	-0.2216		0.54	4.6290	13.200	-0.1944	0.2266	
13.20	5.3148	0.620	-0.2204	0.2248	0.54	5.2602	15.000	-0.1776		
13.20	5.6576	0.660	-0.2282		0.54	6.1018	17.400	-0.1631	0.2002	
13.20	5.8291	0.680	-0.2272		0.54	6.9435	19.800	-0.1613	0.1834	
13.20	6.0005	0.700	-0.2352	0.2157						
13.20	6.1720	0.720	-0.2351		0.62	4.3484	10.800	-0.2316		
13.20	6.3434	0.740	-0.2257		0.62	5.3148	13.200	-0.2204	0.2248	
13.20	6.6863	0.780	-0.2344	0.2053	0.62	6.0395	15.000	-0.2144		
13.20	7.0292	0.820	-0.2275		0.62	7.0058	17.400	-0.2122	0.1972	
13.20	7.3721	0.860	-0.2245	0.1836	0.62	7.9721	19.800	-0.2193	0.1585	
13.20	7.7150	0.900	-0.2248	0.1926						
13.20	7.9293	0.925	-0.2121	0.2008	0.72	5.0498	10.800	-0.2416		
13.20	8.1436	0.950	-0.1957	0.2224	0.72	6.1720	13.200	-0.2351		
13.20	8.3150	0.970	-0.1857	0.2520	0.72	7.0136	15.000	-0.2306		
13.20	8.4436	0.985	-0.1429	0.3062	0.72	8.1358	17.400	-0.2079	0.1809	
13.20	8.5293	0.995	-0.0059	0.4523	0.72	9.2580	19.800	-0.2159	0.1585	
13.20	8.5722	1.000	0.3512	0.3968						
					0.86	6.0317	10.800	-0.2396		
15.00	5.2602	0.540	-0.1776		0.86	7.3721	13.200	-0.2245	0.1836	
15.00	6.0395	0.620	-0.2144		0.86	8.3774	15.000	-0.2119		
15.00	7.0136	0.720	-0.2306		0.86	9.7177	17.400	-0.1930	0.1475	
15.00	8.3774	0.860	-0.2119							
15.00	9.7411	1.000	0.2787		1.00	7.0136	10.800	0.2686		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3512	0.3968	
					1.00	9.7411	15.000	0.2787		
BASE PRESSURES					1.00	10.5204	16.200	0.3014		
PORT	CP				1.00	11.2997	17.400	0.3268		
1	-0.4114				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3186									
3	-0.3088									
4	-0.2513									

TABLE AI.- Continued

(a) Continued

RUN 2	POINT 40	MACH 1.62	ALPHA 11.010	BETA 0.0	Q(PSF) 454.3	H0(PSF) 1082.8	P(PSF) 247.3	RE/FT(X10-6) 1.996		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2184	16.20	9.7411	1.000	0.2674		
10.80	3.7873	0.540	-0.2380							
10.80	4.3484	0.620	-0.2878		17.40	6.1018	0.540	-0.1832	0.2262	
10.80	4.7692	0.680	-0.2706		17.40	7.0058	0.620	-0.2697	0.2229	
10.80	4.9095	0.700		0.2324	17.40	8.1358	0.720	-0.2342	0.2106	
10.80	5.0498	0.720	-0.2881		17.40	9.7177	0.860	-0.2172	0.1812	
10.80	6.0317	0.860	-0.2666		17.40	11.2997	1.000	0.2978		
10.80	6.4876	0.925	-0.2623	0.2314						
10.80	6.8032	0.970	-0.2241		19.80	6.9435	0.540	-0.1829	0.2092	
10.80	6.9084	0.985	-0.1892	0.3377	19.80	7.9721	0.620	-0.2766	0.2066	
10.80	7.0136	1.000	0.2222		19.80	9.2580	0.720	-0.2409	0.1863	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1446	0.2407						
13.20	3.9432	0.460	-0.1756		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2309	0.2517	0.54	3.7873	10.800	-0.2380		
13.20	4.9719	0.580	-0.2511		0.54	4.6290	13.200	-0.2309	0.2517	
13.20	5.3148	0.620	-0.2539	0.2522	0.54	5.2602	15.000	-0.2110		
13.20	5.6576	0.660	-0.2747		0.54	6.1018	17.400	-0.1832	0.2262	
13.20	5.8291	0.680	-0.2746		0.54	6.9435	19.800	-0.1829	0.2092	
13.20	6.0005	0.700	-0.2679	0.2434						
13.20	6.1720	0.720	-0.2648		0.62	4.3484	10.800	-0.2878		
13.20	6.3434	0.740	-0.2660		0.62	5.3148	13.200	-0.2539	0.2522	
13.20	6.6863	0.780	-0.2598	0.2303	0.62	6.0395	15.000	-0.2665		
13.20	7.0292	0.820	-0.2526		0.62	7.0058	17.400	-0.2697	0.2229	
13.20	7.3721	0.860	-0.2550	0.2179	0.62	7.9721	19.800	-0.2766	0.1863	
13.20	7.7150	0.900	-0.2476	0.2306						
13.20	7.9293	0.925	-0.2405	0.2418	0.72	5.0498	10.800	-0.2881		
13.20	8.1436	0.950	-0.2325	0.2731	0.72	6.1720	13.200	-0.2648		
13.20	8.3150	0.970	-0.2281	0.2923	0.72	7.0136	15.000	-0.2578		
13.20	8.4436	0.985	-0.1886	0.3551	0.72	8.1358	17.400	-0.2342	0.2106	
13.20	8.5293	0.995	-0.0466	0.4795	0.72	9.2580	19.800	-0.2409	0.1863	
13.20	8.5722	1.000	0.3130	0.3840						
					0.86	6.0317	10.800	-0.2666		
15.00	5.2602	0.540	-0.2110		0.86	7.3721	13.200	-0.2550	0.2179	
15.00	6.0395	0.620	-0.2665		0.86	8.3774	15.000	-0.2379		
15.00	7.0136	0.720	-0.2578		0.86	9.7177	17.400	-0.2172	0.1812	
15.00	8.3774	0.860	-0.2379							
15.00	9.7411	1.000	0.2348		1.00	7.0136	10.800	0.2222		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3130	0.3840	
					1.00	9.7411	15.000	0.2348		
					1.00	10.5204	16.200	0.2674		
					1.00	11.2997	17.400	0.2978		
BASE PRESSURES					ETA	Y	X	CP-UP	CP-LOW	
PORT	CP									
1	-0.4081									
2	-0.3084									
3	-0.3263									
4	-0.2530									

TABLE AI.- Continued

(a) Concluded

RUN 2	POINT 41	MACH 1.62	ALPHA 11.980	BETA 0.0	Q(PSF) 454.0	H0(PSF) 1082.2	P(PSF) 247.2	RE/FT(X10-6) 1.995		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2443	16.20	9.7411	1.000	0.2479		
10.80	3.7873	0.540	-0.2607							
10.80	4.3484	0.620	-0.3069		17.40	6.1018	0.540	-0.2130	0.2481	
10.80	4.7692	0.680	-0.3140		17.40	7.0058	0.620	-0.2981	0.2444	
10.80	4.9095	0.700		0.2595	17.40	8.1358	0.720	-0.2582	0.2343	
10.80	5.0498	0.720	-0.3103		17.40	9.7177	0.860	-0.2419	0.2091	
10.80	6.0317	0.860	-0.2924		17.40	11.2997	1.000	0.2852		
10.80	6.4876	0.925	-0.2845	0.2678						
10.80	6.8032	0.970	-0.2551		19.80	6.9435	0.540	-0.2203	0.2306	
10.80	6.9084	0.985	-0.2207	0.3829	19.80	7.9721	0.620	-0.2987	0.2292	
10.80	7.0136	1.000	0.1879		19.80	9.2580	0.720	-0.2620	0.2080	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1567	0.2662						
13.20	3.9432	0.460	-0.1900		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2628	0.2707	0.54	3.7873	10.800	-0.2607		
13.20	4.9719	0.580	-0.2950		0.54	4.6290	13.200	-0.2628	0.2707	
13.20	5.3148	0.620	-0.2953	0.2742	0.54	5.2602	15.000	-0.2448		
13.20	5.6576	0.660	-0.3126		0.54	6.1018	17.400	-0.2130	0.2481	
13.20	5.8291	0.680	-0.2998		0.54	6.9435	19.800	-0.2203	0.2306	
13.20	6.0005	0.700	-0.2952	0.2630						
13.20	6.1720	0.720	-0.2870		0.62	4.3484	10.800	-0.3069		
13.20	6.3434	0.740	-0.2766		0.62	5.3148	13.200	-0.2953	0.2742	
13.20	6.6863	0.780	-0.2768	0.2605	0.62	6.0395	15.000	-0.3078		
13.20	7.0292	0.820	-0.2787		0.62	7.0058	17.400	-0.2981	0.2444	
13.20	7.3721	0.860	-0.2761	0.2461	0.62	7.9721	19.800	-0.2987	0.2080	
13.20	7.7150	0.900	-0.2730	0.2646						
13.20	7.9293	0.925	-0.2635	0.2808	0.72	5.0498	10.800	-0.3103		
13.20	8.1436	0.950	-0.2617	0.3130	0.72	6.1720	13.200	-0.2870		
13.20	8.3150	0.970	-0.2560	0.3398	0.72	7.0136	15.000	-0.2807		
13.20	8.4436	0.985	-0.2187	0.4024	0.72	8.1358	17.400	-0.2582	0.2343	
13.20	8.5293	0.995	-0.0878	0.4979	0.72	9.2580	19.800	-0.2620	0.2080	
13.20	8.5722	1.000	0.2968	0.3670						
					0.86	6.0317	10.800	-0.2924		
15.00	5.2602	0.540	-0.2448		0.86	7.3721	13.200	-0.2761	0.2461	
15.00	6.0395	0.620	-0.3078		0.86	8.3774	15.000	-0.2612		
15.00	7.0136	0.720	-0.2807		0.86	9.7177	17.400	-0.2419	0.2091	
15.00	8.3774	0.860	-0.2612							
15.00	9.7411	1.000	0.2152		1.00	7.0136	10.800	0.1879		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2968	0.3670	
					1.00	9.7411	15.000	0.2152		
BASE PRESSURES					1.00	10.5204	16.200	0.2479		
					1.00	11.2997	17.400	0.2852		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4047									
2	-0.3401									
3	-0.3402									
4	-0.2546									

TABLE AI.- Continued

(b) With nose 1

RUN 3	POINT 61	MACH 1.62	ALPHA 8.030	BETA 0.0	Q(PSF) 455.4	H0(PSF) 1085.3	P(PSF) 247.9	RE/FT(X10-6) 2.000	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.1459	16.20	9.7411	1.000	0.3466	
10.80	3.7873	0.540	-0.1663						
10.80	4.3484	0.620	-0.1652		17.40	6.1018	0.540	-0.1396	0.1499
10.80	4.7692	0.680	-0.1747		17.40	7.0058	0.620	-0.1577	0.1450
10.80	4.9095	0.700		0.1553	17.40	8.1358	0.720	-0.1368	0.1269
10.80	5.0498	0.720	-0.1646		17.40	9.7177	0.860	-0.1223	0.0777
10.80	6.0317	0.860	-0.1802		17.40	11.2997	1.000	0.3646	
10.80	6.4876	0.925	-0.1694	0.0972					
10.80	6.8032	0.970	-0.1610		19.80	6.9435	0.540	-0.1315	0.1357
10.80	6.9084	0.985	-0.0411	0.1497	19.80	7.9721	0.620	-0.1559	0.1344
10.80	7.0136	1.000	0.3276		19.80	9.2580	0.720	-0.1407	0.1072
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.1119	0.1648					
13.20	3.9432	0.460	-0.1307		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.1547	0.1781	0.54	3.7873	10.800	-0.1663	
13.20	4.9719	0.580	-0.1657		0.54	4.6290	13.200	-0.1547	0.1781
13.20	5.3148	0.620	-0.1674	0.1790	0.54	5.2602	15.000	-0.1479	
13.20	5.6576	0.660	-0.1628		0.54	6.1018	17.400	-0.1396	0.1499
13.20	5.8291	0.680	-0.1617		0.54	6.9435	19.800	-0.1315	0.1357
13.20	6.0005	0.700	-0.1504	0.1642					
13.20	6.1720	0.720	-0.1467		0.62	4.3484	10.800	-0.1652	
13.20	6.3434	0.740	-0.1513		0.62	5.3148	13.200	-0.1674	0.1790
13.20	6.6863	0.780	-0.1697	0.1436	0.62	6.0395	15.000	-0.1627	
13.20	7.0292	0.820	-0.1680		0.62	7.0058	17.400	-0.1577	0.1450
13.20	7.3721	0.860	-0.1603	0.1097	0.62	7.9721	19.800	-0.1559	0.1072
13.20	7.7150	0.900	-0.1542	0.1120					
13.20	7.9293	0.925	-0.1472	0.1114	0.72	5.0498	10.800	-0.1646	
13.20	8.1436	0.950	-0.1474	0.1150	0.72	6.1720	13.200	-0.1467	
13.20	8.3150	0.970	-0.1206	0.1246	0.72	7.0136	15.000	-0.1519	
13.20	8.4436	0.985	-0.0448	0.1629	0.72	8.1358	17.400	-0.1368	0.1269
13.20	8.5293	0.995	0.0937	0.3678	0.72	9.2580	19.800	-0.1407	0.1072
13.20	8.5722	1.000	0.3900	0.4175					
15.00	5.2602	0.540	-0.1479		0.86	6.0317	10.800	-0.1802	
15.00	6.0395	0.620	-0.1627		0.86	7.3721	13.200	-0.1603	0.1097
15.00	7.0136	0.720	-0.1519		0.86	8.3774	15.000	-0.1458	
15.00	8.3774	0.860	-0.1458		0.86	9.7177	17.400	-0.1223	0.0777
15.00	9.7411	1.000	0.3243						
X	Y	ETA	CP-UP	CP-LOW	1.00	7.0136	10.800	0.3276	
					1.00	8.5722	13.200	0.3900	0.4175
					1.00	9.7411	15.000	0.3243	
					1.00	10.5204	16.200	0.3466	
					1.00	11.2997	17.400	0.3646	
					ETA	Y	X	CP-UP	CP-LOW
BASE PRESSURES									
PORT	CP								
1	-0.3832								
2	-0.3205								
3	-0.3046								
4	-0.2536								

TABLE AI.- Continued

(b) Continued

RUN 3	POINT 62	MACH 1.62	ALPHA 9.010	BETA 0.0	Q(PSF) 455.3	H0(PSF) 1085.1	P(PSF) 247.8	RE/FT(X10-6) 2.000		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1662	16.20	9.7411	1.000	0.3239		
10.80	3.7873	0.540	-0.1894							
10.80	4.3484	0.620	-0.2000		17.40	6.1018	0.540	-0.1576	0.1726	
10.80	4.7692	0.680	-0.1984		17.40	7.0058	0.620	-0.1880	0.1700	
10.80	4.9095	0.700		0.1778	17.40	8.1358	0.720	-0.1804	0.1516	
10.80	5.0498	0.720	-0.2007		17.40	9.7177	0.860	-0.1647	0.1093	
10.80	6.0317	0.860	-0.2066		17.40	11.2997	1.000	0.3424		
10.80	6.4876	0.925	-0.2056	0.1330						
10.80	6.8032	0.970	-0.1786		19.80	6.9435	0.540	-0.1533	0.1615	
10.80	6.9084	0.985	-0.0748	0.2106	19.80	7.9721	0.620	-0.1893	0.1581	
10.80	7.0136	1.000	0.3003		19.80	9.2580	0.720	-0.1907	0.1322	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1276	0.1879						
13.20	3.9432	0.460	-0.1559		ETA					
13.20	4.6290	0.540	-0.1770	0.2022	Y					
13.20	4.9719	0.580	-0.1918		X					
13.20	5.3148	0.620	-0.1955	0.2024	CP-UP					
13.20	5.6576	0.660	-0.1929		CP-LOW					
13.20	5.8291	0.680	-0.1899							
13.20	6.0005	0.700	-0.1946	0.1875						
13.20	6.1720	0.720	-0.1931		0.54					
13.20	6.3434	0.740	-0.1973		3.7873					
13.20	6.6863	0.780	-0.2074	0.1734	4.6290					
13.20	7.0292	0.820	-0.1995		13.200					
13.20	7.3721	0.860	-0.1936	0.1472	-0.1691					
13.20	7.7150	0.900	-0.1847	0.1508	0.1726					
13.20	7.9293	0.925	-0.1820	0.1583	0.1615					
13.20	8.1436	0.950	-0.1737	0.1654						
13.20	8.3150	0.970	-0.1472	0.1786	0.62					
13.20	8.4436	0.985	-0.0874	0.2366	4.3484					
13.20	8.5293	0.995	0.0394	0.4113	10.800					
13.20	8.5722	1.000	0.3717	0.4124	13.200					
					-0.1955					
					0.2024					
					-0.1899					
					-0.1880					
					0.1700					
					-0.1893					
					0.1322					
					0.72					
					5.0498					
					10.800					
					13.200					
					-0.1931					
					-0.1973					
					15.000					
					17.400					
					-0.1804					
					0.1516					
					-0.1907					
					0.1322					
					0.86					
					6.0317					
					10.800					
					-0.2066					
					0.86					
					7.3721					
					13.200					
					-0.1936					
					0.86					
					8.3774					
					15.000					
					-0.1787					
					0.86					
					9.7177					
					17.400					
					-0.1647					
					0.1093					
					1.00					
					7.0136					
					10.800					
					0.3003					
					1.00					
					8.5722					
					13.200					
					0.3717					
					0.4124					
					1.00					
					9.7411					
					15.000					
					0.3013					
					1.00					
					10.5204					
					16.200					
					0.3239					
					1.00					
					11.2997					
					17.400					
					0.3424					
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4040									
2	-0.2929									
3	-0.3113									
4	-0.2574									

BASE PRESSURES

PORT	CP
1	-0.4040
2	-0.2929
3	-0.3113
4	-0.2574

TABLE AI.- Continued

(b) Continued

RUN 3	POINT 63	MACH 1.62	ALPHA 9.990	BETA 0.0	Q(PSF) 455.1	H0(PSF) 1084.7	P(PSF) 247.7	RE/FT(X10-6) 1.999	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.1896	16.20	9.7411	1.000	0.2978	
10.80	3.7873	0.540	-0.2121						
10.80	4.3484	0.620	-0.2223		17.40	6.1018	0.540	-0.1791	0.1974
10.80	4.7692	0.680	-0.2299		17.40	7.0058	0.620	-0.2199	0.1924
10.80	4.9095	0.700		0.2023	17.40	8.1358	0.720	-0.2165	0.1769
10.80	5.0498	0.720	-0.2479		17.40	9.7177	0.860	-0.1907	0.1406
10.80	6.0317	0.860	-0.2343		17.40	11.2997	1.000	0.3240	
10.80	6.4876	0.925	-0.2292	0.1844					
10.80	6.8032	0.970	-0.1965		19.80	6.9435	0.540	-0.1667	0.1843
10.80	6.9084	0.985	-0.1293	0.2692	19.80	7.9721	0.620	-0.2205	0.1788
10.80	7.0136	1.000	0.2653		19.80	9.2580	0.720	-0.2175	0.1588
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.1395	0.2091					
13.20	3.9432	0.460	-0.1665		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.1997	0.2230	0.54	3.7873	10.800	-0.2121	
13.20	4.9719	0.580	-0.2207		0.54	4.6290	13.200	-0.1997	0.2230
13.20	5.3148	0.620	-0.2263	0.2244	0.54	5.2602	15.000	-0.1928	
13.20	5.6576	0.660	-0.2261		0.54	6.1018	17.400	-0.1791	0.1974
13.20	5.8291	0.680	-0.2325		0.54	6.9435	19.800	-0.1667	0.1843
13.20	6.0005	0.700	-0.2409	0.2128					
13.20	6.1720	0.720	-0.2443		0.62	4.3484	10.800	-0.2223	
13.20	6.3434	0.740	-0.2290		0.62	5.3148	13.200	-0.2263	0.2244
13.20	6.6863	0.780	-0.2377	0.1992	0.62	6.0395	15.000	-0.2190	
13.20	7.0292	0.820	-0.2276		0.62	7.0058	17.400	-0.2199	0.1924
13.20	7.3721	0.860	-0.2225	0.1801	0.62	7.9721	19.800	-0.2205	0.1588
13.20	7.7150	0.900	-0.2200	0.1869					
13.20	7.9293	0.925	-0.2106	0.1986	0.72	5.0498	10.800	-0.2479	
13.20	8.1436	0.950	-0.1931	0.2127	0.72	6.1720	13.200	-0.2443	
13.20	8.3150	0.970	-0.1816	0.2354	0.72	7.0136	15.000	-0.2367	
13.20	8.4436	0.985	-0.1333	0.2970	0.72	8.1358	17.400	-0.2165	0.1769
13.20	8.5293	0.995	0.0017	0.4527	0.72	9.2580	19.800	-0.2175	0.1588
13.20	8.5722	1.000	0.3497	0.4013					
					0.86	6.0317	10.800	-0.2343	
15.00	5.2602	0.540	-0.1928		0.86	7.3721	13.200	-0.2225	0.1801
15.00	6.0395	0.620	-0.2190		0.86	8.3774	15.000	-0.2082	
15.00	7.0136	0.720	-0.2367		0.86	9.7177	17.400	-0.1907	0.1406
15.00	8.3774	0.860	-0.2082						
15.00	9.7411	1.000	0.2754		1.00	7.0136	10.800	0.2653	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3497	0.4013
					1.00	9.7411	15.000	0.2754	
					1.00	10.5204	16.200	0.2978	
					1.00	11.2997	17.400	0.3240	
					ETA	Y	X	CP-UP	CP-LOW
BASE PRESSURES									
PORT	CP								
1	-0.4131								
2	-0.3307								
3	-0.3168								
4	-0.2584								

TABLE AI.- Continued

(b) Continued

RUN 3	POINT 64	MACH 1.62	ALPHA 11.020	BETA 0.0	Q(PSF) 456.0	H0(PSF) 1086.8	P(PSF) 248.2	RE/FT(X10-6) 2.003		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2158	16.20	9.7411	1.000	0.2605		
10.80	3.7873	0.540	-0.2364							
10.80	4.3484	0.620	-0.2552		17.40	6.1018	0.540	-0.2002	0.2251	
10.80	4.7692	0.680	-0.2759		17.40	7.0058	0.620	-0.2713	0.2219	
10.80	4.9095	0.700		0.2295	17.40	8.1358	0.720	-0.2429	0.2036	
10.80	5.0498	0.720	-0.2898		17.40	9.7177	0.860	-0.2177	0.1728	
10.80	6.0317	0.860	-0.2679		17.40	11.2997	1.000	0.3008		
10.80	6.4876	0.925	-0.2556	0.2251						
10.80	6.8032	0.970	-0.2249		19.80	6.9435	0.540	-0.1910	0.2086	
10.80	6.9084	0.985	-0.1747	0.3298	19.80	7.9721	0.620	-0.2773	0.2059	
10.80	7.0136	1.000	0.2269		19.80	9.2580	0.720	-0.2440	0.1858	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1559	0.2345						
13.20	3.9432	0.460	-0.1709		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2261	0.2477	0.54	3.7873	10.800	-0.2364		
13.20	4.9719	0.580	-0.2521		0.54	4.6290	13.200	-0.2261	0.2477	
13.20	5.3148	0.620	-0.2561	0.2499	0.54	5.2602	15.000	-0.2177		
13.20	5.6576	0.660	-0.2809		0.54	6.1018	17.400	-0.2002	0.2251	
13.20	5.8291	0.680	-0.2790		0.54	6.9435	19.800	-0.1910	0.2086	
13.20	6.0005	0.700	-0.2793	0.2411						
13.20	6.1720	0.720	-0.2648		0.62	4.3484	10.800	-0.2552		
13.20	6.3434	0.740	-0.2706		0.62	5.3148	13.200	-0.2561	0.2499	
13.20	6.6863	0.780	-0.2612	0.2322	0.62	6.0395	15.000	-0.2659		
13.20	7.0292	0.820	-0.2530		0.62	7.0058	17.400	-0.2713	0.2219	
13.20	7.3721	0.860	-0.2501	0.2136	0.62	7.9721	19.800	-0.2773	0.1858	
13.20	7.7150	0.900	-0.2474	0.2240						
13.20	7.9293	0.925	-0.2333	0.2407	0.72	5.0498	10.800	-0.2898		
13.20	8.1436	0.950	-0.2240	0.2580	0.72	6.1720	13.200	-0.2648		
13.20	8.3150	0.970	-0.2196	0.2848	0.72	7.0136	15.000	-0.2630		
13.20	8.4436	0.985	-0.1848	0.3540	0.72	8.1358	17.400	-0.2429	0.2036	
13.20	8.5293	0.995	-0.0440	0.4796	0.72	9.2580	19.800	-0.2440	0.1858	
13.20	8.5722	1.000	0.3255	0.3888						
					0.86	6.0317	10.800	-0.2679		
15.00	5.2602	0.540	-0.2177		0.86	7.3721	13.200	-0.2501	0.2136	
15.00	6.0395	0.620	-0.2659		0.86	8.3774	15.000	-0.2395		
15.00	7.0136	0.720	-0.2630		0.86	9.7177	17.400	-0.2177	0.1728	
15.00	8.3774	0.860	-0.2395							
15.00	9.7411	1.000	0.2444		1.00	7.0136	10.800	0.2269		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3255	0.3888	
					1.00	9.7411	15.000	0.2444		
BASE PRESSURES					1.00	10.5204	16.200	0.2605		
					1.00	11.2997	17.400	0.3008		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4087									
2	-0.3141									
3	-0.3316									
4	-0.2587									

TABLE AI.- Continued

(b) Continued

RUN 4	POINT 83	MACH 1.62	ALPHA 8.000	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1085.9	P(PSF) 248.0	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1480	16.20	9.7411	1.000	0.3510		
10.80	3.7873	0.540	-0.1629							
10.80	4.3484	0.620	-0.1747		17.40	6.1018	0.540	-0.1384	0.1525	
10.80	4.7692	0.680	-0.1731		17.40	7.0058	0.620	-0.1545	0.1496	
10.80	4.9095	0.700		0.1530	17.40	8.1358	0.720	-0.1366	0.1307	
10.80	5.0498	0.720	-0.1664		17.40	9.7177	0.860	-0.1182	0.0777	
10.80	6.0317	0.860	-0.1738		17.40	11.2997	1.000	0.3650		
10.80	6.4876	0.925	-0.1688	0.0980						
10.80	6.8032	0.970	-0.1589		19.80	6.9435	0.540	-0.1341	0.1347	
10.80	6.9084	0.985	-0.0406	0.1464	19.80	7.9721	0.620	-0.1507	0.1347	
10.80	7.0136	1.000	0.3278		19.80	9.2580	0.720	-0.1391	0.1110	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1100	0.1664						
13.20	3.9432	0.460	-0.1296		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1493	0.1805	0.54	3.7873	10.800	-0.1629		
13.20	4.9719	0.580	-0.1597		0.54	4.6290	13.200	-0.1493	0.1805	
13.20	5.3148	0.620	-0.1674	0.1811	0.54	5.2602	15.000	-0.1452		
13.20	5.6576	0.660	-0.1656		0.54	6.1018	17.400	-0.1384	0.1525	
13.20	5.8291	0.680	-0.1613		0.54	6.9435	19.800	-0.1341	0.1347	
13.20	6.0005	0.700	-0.1563	0.1669						
13.20	6.1720	0.720	-0.1559		0.62	4.3484	10.800	-0.1747		
13.20	6.3434	0.740	-0.1590		0.62	5.3148	13.200	-0.1674	0.1811	
13.20	6.6863	0.780	-0.1561	0.1446	0.62	6.0395	15.000	-0.1592		
13.20	7.0292	0.820	-0.1648		0.62	7.0058	17.400	-0.1545	0.1496	
13.20	7.3721	0.860	-0.1545	0.1107	0.62	7.9721	19.800	-0.1507	0.1110	
13.20	7.7150	0.900	-0.1561	0.1170						
13.20	7.9293	0.925	-0.1473	0.1126	0.72	5.0498	10.800	-0.1664		
13.20	8.1436	0.950	-0.1460	0.1120	0.72	6.1720	13.200	-0.1559		
13.20	8.3150	0.970	-0.1231	0.1252	0.72	7.0136	15.000	-0.1482		
13.20	8.4436	0.985	-0.0394	0.1668	0.72	8.1358	17.400	-0.1366	0.1307	
13.20	8.5293	0.995	0.0937	0.3711	0.72	9.2580	19.800	-0.1391	0.1110	
13.20	8.5722	1.000	0.3918	0.4176						
					0.86	6.0317	10.800	-0.1738		
15.00	5.2602	0.540	-0.1452		0.86	7.3721	13.200	-0.1545	0.1107	
15.00	6.0395	0.620	-0.1592		0.86	8.3774	15.000	-0.1439		
15.00	7.0136	0.720	-0.1482		0.86	9.7177	17.400	-0.1182	0.0777	
15.00	8.3774	0.860	-0.1439							
15.00	9.7411	1.000	0.3272		1.00	7.0136	10.800	0.3278		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3918	0.4176	
					1.00	9.7411	15.000	0.3272		
					1.00	10.5204	16.200	0.3510		
					1.00	11.2997	17.400	0.3650		
					ETA	Y	X	CP-UP	CP-LOW	
BASE PRESSURES										
PORT	CP									
1	-0.3836									
2	-0.3162									
3	-0.3002									
4	-0.2464									

TABLE AI.- Continued

(b) Continued

RUN 4	POINT 84	MACH 1.62	ALPHA 8.980	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1086.0	P(PSF) 248.0	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1665	16.20	9.7411	1.000	0.3230		
10.80	3.7873	0.540	-0.1857							
10.80	4.3484	0.620	-0.2006		17.40	6.1018	0.540	-0.1582	0.1726	
10.80	4.7692	0.680	-0.1980		17.40	7.0058	0.620	-0.1827	0.1693	
10.80	4.9095	0.700		0.1744	17.40	8.1358	0.720	-0.1846	0.1525	
10.80	5.0498	0.720	-0.1959		17.40	9.7177	0.860	-0.1592	0.1086	
10.80	6.0317	0.860	-0.2092		17.40	11.2997	1.000	0.3424		
10.80	6.4876	0.925	-0.2033	0.1429						
10.80	6.8032	0.970	-0.1767		19.80	6.9435	0.540	-0.1529	0.1563	
10.80	6.9084	0.985	-0.0775	0.2090	19.80	7.9721	0.620	-0.1817	0.1542	
10.80	7.0136	1.000	0.2948		19.80	9.2580	0.720	-0.1823	0.1311	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1248	0.1837						
13.20	3.9432	0.460	-0.1475		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1748	0.2019	0.54	3.7873	10.800	-0.1857		
13.20	4.9719	0.580	-0.1894		0.54	4.6290	13.200	-0.1748	0.2019	
13.20	5.3148	0.620	-0.1914	0.2014	0.54	5.2602	15.000	-0.1664		
13.20	5.6576	0.660	-0.1887		0.54	6.1018	17.400	-0.1582	0.1726	
13.20	5.8291	0.680	-0.1925		0.54	6.9435	19.800	-0.1529	0.1563	
13.20	6.0005	0.700	-0.1892	0.1884						
13.20	6.1720	0.720	-0.1900		0.62	4.3484	10.800	-0.2006		
13.20	6.3434	0.740	-0.2107		0.62	5.3148	13.200	-0.1914	0.2014	
13.20	6.6863	0.780	-0.2010	0.1694	0.62	6.0395	15.000	-0.1861		
13.20	7.0292	0.820	-0.1993		0.62	7.0058	17.400	-0.1827	0.1693	
13.20	7.3721	0.860	-0.1927	0.1445	0.62	7.9721	19.800	-0.1817	0.1311	
13.20	7.7150	0.900	-0.1830	0.1491						
13.20	7.9293	0.925	-0.1812	0.1554	0.72	5.0498	10.800	-0.1959		
13.20	8.1436	0.950	-0.1708	0.1649	0.72	6.1720	13.200	-0.1900		
13.20	8.3150	0.970	-0.1444	0.1849	0.72	7.0136	15.000	-0.1906		
13.20	8.4436	0.985	-0.0812	0.2309	0.72	8.1358	17.400	-0.1846	0.1525	
13.20	8.5293	0.995	0.0411	0.4110	0.72	9.2580	19.800	-0.1823	0.1311	
13.20	8.5722	1.000	0.3710	0.4079						
					0.86	6.0317	10.800	-0.2092		
15.00	5.2602	0.540	-0.1664		0.86	7.3721	13.200	-0.1927	0.1445	
15.00	6.0395	0.620	-0.1861		0.86	8.3774	15.000	-0.1790		
15.00	7.0136	0.720	-0.1906		0.86	9.7177	17.400	-0.1592	0.1086	
15.00	8.3774	0.860	-0.1790							
15.00	9.7411	1.000	0.3017		1.00	7.0136	10.800	0.2948		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3710	0.4079	
					1.00	9.7411	15.000	0.3017		
BASE PRESSURES					1.00	10.5204	16.200	0.3230		
					1.00	11.2997	17.400	0.3424		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4048									
2	-0.2916									
3	-0.3065									
4	-0.2517									

TABLE AI.- Continued

(b) Continued

RUN 4	POINT 85	MACH 1.62	ALPHA 9.980	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1085.9	P(PSF) 248.0	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1916	16.20	9.7411	1.000	0.2984		
10.80	3.7873	0.540	-0.2096							
10.80	4.3484	0.620	-0.2092		17.40	6.1018	0.540	-0.1728	0.1967	
10.80	4.7692	0.680	-0.2256		17.40	7.0058	0.620	-0.2117	0.1961	
10.80	4.9095	0.700		0.1985	17.40	8.1358	0.720	-0.2126	0.1794	
10.80	5.0498	0.720	-0.2412		17.40	9.7177	0.860	-0.1896	0.1403	
10.80	6.0317	0.860	-0.2365		17.40	11.2997	1.000	0.3226		
10.80	6.4876	0.925	-0.2303	0.1822						
10.80	6.8032	0.970	-0.1996		19.80	6.9435	0.540	-0.1657	0.1785	
10.80	6.9084	0.985	-0.1209	0.2650	19.80	7.9721	0.620	-0.2138	0.1800	
10.80	7.0136	1.000	0.2667		19.80	9.2580	0.720	-0.2151	0.1567	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1399	0.2074						
13.20	3.9432	0.460	-0.1645		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2012	0.2232	0.54	3.7873	10.800	-0.2096		
13.20	4.9719	0.580	-0.2175		0.54	4.6290	13.200	-0.2012	0.2232	
13.20	5.3148	0.620	-0.2228	0.2225	0.54	5.2602	15.000	-0.1882		
13.20	5.6576	0.660	-0.2178		0.54	6.1018	17.400	-0.1728	0.1967	
13.20	5.8291	0.680	-0.2272		0.54	6.9435	19.800	-0.1657	0.1785	
13.20	6.0005	0.700	-0.2357	0.2130						
13.20	6.1720	0.720	-0.2329		0.62	4.3484	10.800	-0.2092		
13.20	6.3434	0.740	-0.2311		0.62	5.3148	13.200	-0.2228	0.2225	
13.20	6.6863	0.780	-0.2348	0.1992	0.62	6.0395	15.000	-0.2137		
13.20	7.0292	0.820	-0.2274		0.62	7.0058	17.400	-0.2117	0.1961	
13.20	7.3721	0.860	-0.2270	0.1772	0.62	7.9721	19.800	-0.2138	0.1567	
13.20	7.7150	0.900	-0.2213	0.1862						
13.20	7.9293	0.925	-0.2115	0.1981	0.72	5.0498	10.800	-0.2412		
13.20	8.1436	0.950	-0.1924	0.2131	0.72	6.1720	13.200	-0.2329		
13.20	8.3150	0.970	-0.1767	0.2361	0.72	7.0136	15.000	-0.2352		
13.20	8.4436	0.985	-0.1380	0.2987	0.72	8.1358	17.400	-0.2126	0.1794	
13.20	8.5293	0.995	-0.0021	0.4484	0.72	9.2580	19.800	-0.2151	0.1567	
13.20	8.5722	1.000	0.3518	0.3998						
					0.86	6.0317	10.800	-0.2365		
15.00	5.2602	0.540	-0.1882		0.86	7.3721	13.200	-0.2270	0.1772	
15.00	6.0395	0.620	-0.2137		0.86	8.3774	15.000	-0.2104		
15.00	7.0136	0.720	-0.2352		0.86	9.7177	17.400	-0.1896	0.1403	
15.00	8.3774	0.860	-0.2104							
15.00	9.7411	1.000	0.2749		1.00	7.0136	10.800	0.2667		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3518	0.3998	
					1.00	9.7411	15.000	0.2749		
BASE PRESSURES					1.00	10.5204	16.200	0.2984		
PORT	CP				1.00	11.2997	17.400	0.3226		
1	-0.4110				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3332									
3	-0.3121									
4	-0.2542									

APPENDIX A

APPENDIX A

APPENDIX A

TABLE AI.- Continued

(b) Continued

RUN 4	POINT 87	MACH 1.62	ALPHA 11.990	BETA 0.0	Q(PSF) 454.9	H0(PSF) 1084.1	P(PSF) 247.6	RE/FT(X10-6) 1.998		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2413	16.20	9.7411	1.000	0.2456		
10.80	3.7873	0.540	-0.2596							
10.80	4.3484	0.620	-0.3129		17.40	6.1018	0.540	-0.2205	0.2487	
10.80	4.7692	0.680	-0.3167		17.40	7.0058	0.620	-0.3004	0.2483	
10.80	4.9095	0.700		0.2542	17.40	8.1358	0.720	-0.2637	0.2356	
10.80	5.0498	0.720	-0.3139		17.40	9.7177	0.860	-0.2407	0.2103	
10.80	6.0317	0.860	-0.2915		17.40	11.2997	1.000	0.2810		
10.80	6.4876	0.925	-0.2833	0.2582						
10.80	6.8032	0.970	-0.2578		19.80	6.9435	0.540	-0.2157	0.2318	
10.80	6.9084	0.985	-0.1884	0.3781	19.80	7.9721	0.620	-0.3004	0.2302	
10.80	7.0136	1.000	0.1907		19.80	9.2580	0.720	-0.2636	0.2097	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1657	0.2602						
13.20	3.9432	0.460	-0.2001		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2541	0.2719	0.54	3.7873	10.800	-0.2596		
13.20	4.9719	0.580	-0.2840		0.54	4.6290	13.200	-0.2541	0.2719	
13.20	5.3148	0.620	-0.2737	0.2728	0.54	5.2602	15.000	-0.2399		
13.20	5.6576	0.660	-0.3090		0.54	6.1018	17.400	-0.2205	0.2487	
13.20	5.8291	0.680	-0.3042		0.54	6.9435	19.800	-0.2157	0.2318	
13.20	6.0005	0.700	-0.2927	0.2619						
13.20	6.1720	0.720	-0.2922		0.62	4.3484	10.800	-0.3129		
13.20	6.3434	0.740	-0.2850		0.62	5.3148	13.200	-0.2737	0.2728	
13.20	6.6863	0.780	-0.2864	0.2577	0.62	6.0395	15.000	-0.3060		
13.20	7.0292	0.820	-0.2782		0.62	7.0058	17.400	-0.3004	0.2483	
13.20	7.3721	0.860	-0.2737	0.2439	0.62	7.9721	19.800	-0.3004	0.2097	
13.20	7.7150	0.900	-0.2710	0.2621						
13.20	7.9293	0.925	-0.2599	0.2769	0.72	5.0498	10.800	-0.3139		
13.20	8.1436	0.950	-0.2585	0.2994	0.72	6.1720	13.200	-0.2922		
13.20	8.3150	0.970	-0.2565	0.3277	0.72	7.0136	15.000	-0.2832		
13.20	8.4436	0.985	-0.2200	0.3998	0.72	8.1358	17.400	-0.2637	0.2356	
13.20	8.5293	0.995	-0.0835	0.5009	0.72	9.2580	19.800	-0.2636	0.2097	
13.20	8.5722	1.000	0.2968	0.3744						
					0.86	6.0317	10.800	-0.2915		
15.00	5.2602	0.540	-0.2399		0.86	7.3721	13.200	-0.2737	0.2439	
15.00	6.0395	0.620	-0.3060		0.86	8.3774	15.000	-0.2633		
15.00	7.0136	0.720	-0.2832		0.86	9.7177	17.400	-0.2407	0.2103	
15.00	8.3774	0.860	-0.2633							
15.00	9.7411	1.000	0.2138		1.00	7.0136	10.800	0.1907		
X	Y	ETA	CP-UP	CP-LOW	ETA	Y	X	CP-UP	CP-LOW	
					1.00	8.5722	13.200	0.2968	0.3744	
					1.00	9.7411	15.000	0.2138		
BASE PRESSURES										
PORT	CP									
1	-0.4055									
2	-0.3445									
3	-0.3427									
4	-0.2584									

APPENDIX A

APPENDIX A

APPENDIX A

TABLE AII.- CAMBERED WING-BODY-CANARD CONFIGURATION WITH NOSE 1

(a) $\delta_c = 0^\circ$

RUN 5	POINT 112	MACH 1.62	ALPHA 8.930	BETA 0.0	Q(PSF) 454.8	H0(PSF) 1083.9	P(PSF) 247.5	RE/FT(X10-6) 1.998		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1589	16.20	9.7411	1.000	0.3144		
10.80	3.7873	0.540	-0.1637							
10.80	4.3484	0.620	-0.1579		17.40	6.1018	0.540	-0.1607	0.1710	
10.80	4.7692	0.680	-0.1652		17.40	7.0058	0.620	-0.1679	0.1691	
10.80	4.9095	0.700		0.1644	17.40	8.1358	0.720	-0.1439	0.1544	
10.80	5.0498	0.720	-0.1669		17.40	9.7177	0.860	-0.1713	0.1146	
10.80	6.0317	0.860	-0.2255		17.40	11.2997	1.000	0.3363		
10.80	6.4876	0.925	-0.2246	0.1252						
10.80	6.8032	0.970	-0.1942		19.80	6.9435	0.540	-0.1564	0.1521	
10.80	6.9084	0.985	-0.1090	0.2105	19.80	7.9721	0.620	-0.1730	0.1515	
10.80	7.0136	1.000	0.2756		19.80	9.2580	0.720	-0.1549	0.1309	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1334	0.1806						
13.20	3.9432	0.460	-0.1458		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1600	0.2007	0.54	3.7873	10.800	-0.1637		
13.20	4.9719	0.580	-0.1647		0.54	4.6290	13.200	-0.1600	0.2007	
13.20	5.3148	0.620	-0.1700	0.2011	0.54	5.2602	15.000	-0.1611		
13.20	5.6576	0.660	-0.1556		0.54	6.1018	17.400	-0.1607	0.1710	
13.20	5.8291	0.680	-0.1585		0.54	6.9435	19.800	-0.1564	0.1521	
13.20	6.0005	0.700	-0.1597	0.1859						
13.20	6.1720	0.720	-0.1559		0.62	4.3484	10.800	-0.1579		
13.20	6.3434	0.740	-0.1589		0.62	5.3148	13.200	-0.1700	0.2011	
13.20	6.6863	0.780	-0.1856	0.1683	0.62	6.0395	15.000	-0.1657		
13.20	7.0292	0.820	-0.2153		0.62	7.0058	17.400	-0.1679	0.1691	
13.20	7.3721	0.860	-0.2139	0.1414	0.62	7.9721	19.800	-0.1730	0.1309	
13.20	7.7150	0.900	-0.2086	0.1476						
13.20	7.9293	0.925	-0.2015	0.1545	0.72	5.0498	10.800	-0.1669		
13.20	8.1436	0.950	-0.1894	0.1666	0.72	6.1720	13.200	-0.1559		
13.20	8.3150	0.970	-0.1602	0.1838	0.72	7.0136	15.000	-0.1548		
13.20	8.4436	0.985	-0.0732	0.2388	0.72	8.1358	17.400	-0.1439	0.1544	
13.20	8.5293	0.995	0.0260	0.4081	0.72	9.2580	19.800	-0.1549	0.1309	
13.20	8.5722	1.000	0.3545	0.3928						
					0.86	6.0317	10.800	-0.2255		
15.00	5.2602	0.540	-0.1611		0.86	7.3721	13.200	-0.2139	0.1414	
15.00	6.0395	0.620	-0.1657		0.86	8.3774	15.000	-0.1940		
15.00	7.0136	0.720	-0.1548		0.86	9.7177	17.400	-0.1713	0.1146	
15.00	8.3774	0.860	-0.1940							
15.00	9.7411	1.000	0.2887		1.00	7.0136	10.800	0.2756		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3545	0.3928	
BASE PRESSURES					1.00	9.7411	15.000	0.2887		
					1.00	10.5204	16.200	0.3144		
PORT	CP				1.00	11.2997	17.400	0.3363		
1	-0.3986				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3018									
3	-0.3085									
4	-0.2505									

(a) Continued

BASE PRESSURES

PORT	CP
1	-0.4109
2	-0.3199
3	-0.3234
4	-0.2561

TABLE AII.- Continued

(a) Continued

RUN 5	POINT 115	MACH 1.62	ALPHA 11.960	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1086.0	P(PSF) 248.0	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2278	16.20	9.7411	1.000	0.2376		
10.80	3.7873	0.540	-0.2133							
10.80	4.3484	0.620	-0.2215		17.40	6.1018	0.540	-0.2142	0.2433	
10.80	4.7692	0.680	-0.2353		17.40	7.0058	0.620	-0.2346	0.2452	
10.80	4.9095	0.700		0.2377	17.40	8.1358	0.720	-0.2821	0.2330	
10.80	5.0498	0.720	-0.2967		17.40	9.7177	0.860	-0.2597	0.2114	
10.80	6.0317	0.860	-0.3355		17.40	11.2997	1.000	0.2757		
10.80	6.4876	0.925	-0.3204	0.2396						
10.80	6.8032	0.970	-0.2858		19.80	6.9435	0.540	-0.2126	0.2253	
10.80	6.9084	0.985	-0.2123	0.3594	19.80	7.9721	0.620	-0.2583	0.2225	
10.80	7.0136	1.000	0.1627		19.80	9.2580	0.720	-0.2874	0.2051	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1765	0.2579						
13.20	3.9432	0.460	-0.1944		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2163	0.2725	0.54	3.7873	10.800	-0.2133		
13.20	4.9719	0.580	-0.2223		0.54	4.6290	13.200	-0.2163	0.2725	
13.20	5.3148	0.620	-0.2253	0.2739	0.54	5.2602	15.000	-0.2206		
13.20	5.6576	0.660	-0.2395		0.54	6.1018	17.400	-0.2142	0.2433	
13.20	5.8291	0.680	-0.2621		0.54	6.9435	19.800	-0.2126	0.2253	
13.20	6.0005	0.700	-0.2799	0.2646						
13.20	6.1720	0.720	-0.3026		0.62	4.3484	10.800	-0.2215		
13.20	6.3434	0.740	-0.2979		0.62	5.3148	13.200	-0.2253	0.2739	
13.20	6.6863	0.780	-0.3085	0.2566	0.62	6.0395	15.000	-0.2277		
13.20	7.0292	0.820	-0.3075		0.62	7.0058	17.400	-0.2346	0.2452	
13.20	7.3721	0.860	-0.3088	0.2396	0.62	7.9721	19.800	-0.2583	0.2051	
13.20	7.7150	0.900	-0.2990	0.2615						
13.20	7.9293	0.925	-0.2935	0.2721	0.72	5.0498	10.800	-0.2967		
13.20	8.1436	0.950	-0.2825	0.3100	0.72	6.1720	13.200	-0.3026		
13.20	8.3150	0.970	-0.2753	0.3290	0.72	7.0136	15.000	-0.3014		
13.20	8.4436	0.985	-0.2006	0.3942	0.72	8.1358	17.400	-0.2821	0.2330	
13.20	8.5293	0.995	-0.1006	0.4923	0.72	9.2580	19.800	-0.2874	0.2051	
13.20	8.5722	1.000	0.2770	0.3508						
					0.86	6.0317	10.800	-0.3355		
15.00	5.2602	0.540	-0.2206		0.86	7.3721	13.200	-0.3088	0.2396	
15.00	6.0395	0.620	-0.2277		0.86	8.3774	15.000	-0.2781		
15.00	7.0136	0.720	-0.3014		0.86	9.7177	17.400	-0.2597	0.2114	
15.00	8.3774	0.860	-0.2781							
15.00	9.7411	1.000	0.2030		1.00	7.0136	10.800	0.1627		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2770	0.3508	
					1.00	9.7411	15.000	0.2030		
BASE PRESSURES					1.00	10.5204	16.200	0.2376		
					1.00	11.2997	17.400	0.2757		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4100									
2	-0.3621									
3	-0.3431									
4	-0.2558									

TABLE AII.- Continued

(a) Continued

RUN 8	POINT 188	MACH 1.62	ALPHA 8.010	BETA 0.0	Q(PSF) 453.8	H0(PSF) 1081.7	P(PSF) 247.0	RE/FT(X10-6) 1.994		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1338	16.20	9.7411	1.000	0.3434		
10.80	3.7873	0.540	-0.1491							
10.80	4.3484	0.620	-0.1454		17.40	6.1018	0.540	-0.1484	0.1482	
10.80	4.7692	0.680	-0.1457		17.40	7.0058	0.620	-0.1462	0.1468	
10.80	4.9095	0.700		0.1405	17.40	8.1358	0.720	-0.1210	0.1293	
10.80	5.0498	0.720	-0.1602		17.40	9.7177	0.860	-0.1397	0.0836	
10.80	6.0317	0.860	-0.1878		17.40	11.2997	1.000	0.3584		
10.80	6.4876	0.925	-0.2054	0.0864						
10.80	6.8032	0.970	-0.1751		19.80	6.9435	0.540	-0.1400	0.1308	
10.80	6.9084	0.985	-0.0568	0.1450	19.80	7.9721	0.620	-0.1571	0.1301	
10.80	7.0136	1.000	0.3089		19.80	9.2580	0.720	-0.1314	0.1098	
	X		Y		ETA		CP-UP		CP-LOW	
13.20	3.4289	0.400	-0.1189	0.1605						
13.20	3.9432	0.460	-0.1331		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1427	0.1757	0.54	3.7873	10.800	-0.1491		
13.20	4.9719	0.580	-0.1432		0.54	4.6290	13.200	-0.1427	0.1757	
13.20	5.3148	0.620	-0.1444	0.1791	0.54	5.2602	15.000	-0.1424		
13.20	5.6576	0.660	-0.1408		0.54	6.1018	17.400	-0.1484	0.1482	
13.20	5.8291	0.680	-0.1405		0.54	6.9435	19.800	-0.1400	0.1308	
13.20	6.0005	0.700	-0.1398	0.1612						
13.20	6.1720	0.720	-0.1444		0.62	4.3484	10.800	-0.1454		
13.20	6.3434	0.740	-0.1448		0.62	5.3148	13.200	-0.1444	0.1791	
13.20	6.6863	0.780	-0.1475	0.1442	0.62	6.0395	15.000	-0.1457		
13.20	7.0292	0.820	-0.1719		0.62	7.0058	17.400	-0.1462	0.1468	
13.20	7.3721	0.860	-0.1775	0.1096	0.62	7.9721	19.800	-0.1571	0.1098	
13.20	7.7150	0.900	-0.1739	0.1118						
13.20	7.9293	0.925	-0.1702	0.1108	0.72	5.0498	10.800	-0.1602		
13.20	8.1436	0.950	-0.1622	0.1079	0.72	6.1720	13.200	-0.1444		
13.20	8.3150	0.970	-0.1406	0.1273	0.72	7.0136	15.000	-0.1331		
13.20	8.4436	0.985	-0.0095	0.1699	0.72	8.1358	17.400	-0.1210	0.1293	
13.20	8.5293	0.995	0.0698	0.3662	0.72	9.2580	19.800	-0.1314	0.1098	
13.20	8.5722	1.000	0.3717	0.3970						
					0.86	6.0317	10.800	-0.1878		
15.00	5.2602	0.540	-0.1424		0.86	7.3721	13.200	-0.1775	0.1096	
15.00	6.0395	0.620	-0.1457		0.86	8.3774	15.000	-0.1585		
15.00	7.0136	0.720	-0.1331		0.86	9.7177	17.400	-0.1397	0.0836	
15.00	8.3774	0.860	-0.1585							
15.00	9.7411	1.000	0.3185		1.00	7.0136	10.800	0.3089		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3717	0.3970	
					1.00	9.7411	15.000	0.3185		
BASE PRESSURES					1.00	10.5204	16.200	0.3434		
					1.00	11.2997	17.400	0.3584		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.3804									
2	-0.3256									
3	-0.3053									
4	-0.2490									

TABLE AII.- Continued

(a) Continued

RUN 8	POINT 190	MACH 1.62	ALPHA 9.020	BETA 0.0	Q(PSF) 452.8	H0(PSF) 1079.2	P(PSF) 246.5	RE/FT(X10-6) 1.989		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1589	16.20	9.7411	1.000	0.3137		
10.80	3.7873	0.540	-0.1644							
10.80	4.3484	0.620	-0.1644		17.40	6.1018	0.540	-0.1674	0.1709	
10.80	4.7692	0.680	-0.1674		17.40	7.0058	0.620	-0.1706	0.1697	
10.80	4.9095	0.700		0.1623	17.40	8.1358	0.720	-0.1494	0.1542	
10.80	5.0498	0.720	-0.1706		17.40	9.7177	0.860	-0.1734	0.1155	
10.80	6.0317	0.860	-0.2311		17.40	11.2997	1.000	0.3351		
10.80	6.4876	0.925	-0.2259	0.1297						
10.80	6.8032	0.970	-0.2014		19.80	6.9435	0.540	-0.1580	0.1511	
10.80	6.9084	0.985	-0.1160	0.2146	19.80	7.9721	0.620	-0.1793	0.1520	
10.80	7.0136	1.000	0.2714		19.80	9.2580	0.720	-0.1586	0.1310	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1344	0.1838						
13.20	3.9432	0.460	-0.1525		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1614	0.2002	0.54	3.7873	10.800	-0.1644		
13.20	4.9719	0.580	-0.1614		0.54	4.6290	13.200	-0.1614	0.2002	
13.20	5.3148	0.620	-0.1668	0.2011	0.54	5.2602	15.000	-0.1627		
13.20	5.6576	0.660	-0.1673		0.54	6.1018	17.400	-0.1674	0.1709	
13.20	5.8291	0.680	-0.1731		0.54	6.9435	19.800	-0.1580	0.1511	
13.20	6.0005	0.700	-0.1629	0.1895						
13.20	6.1720	0.720	-0.1593		0.62	4.3484	10.800	-0.1644		
13.20	6.3434	0.740	-0.1621		0.62	5.3148	13.200	-0.1668	0.2011	
13.20	6.6863	0.780	-0.1758	0.1713	0.62	6.0395	15.000	-0.1685		
13.20	7.0292	0.820	-0.2177		0.62	7.0058	17.400	-0.1706	0.1697	
13.20	7.3721	0.860	-0.1880	0.1442	0.62	7.9721	19.800	-0.1793	0.1310	
13.20	7.7150	0.900	-0.2129	0.1488						
13.20	7.9293	0.925	-0.2025	0.1580	0.72	5.0498	10.800	-0.1706		
13.20	8.1436	0.950	-0.1859	0.1720	0.72	6.1720	13.200	-0.1593		
13.20	8.3150	0.970	-0.1665	0.1939	0.72	7.0136	15.000	-0.1597		
13.20	8.4436	0.985	-0.0693	0.2419	0.72	8.1358	17.400	-0.1494	0.1542	
13.20	8.5293	0.995	0.0340	0.4125	0.72	9.2580	19.800	-0.1586	0.1310	
13.20	8.5722	1.000	0.3527	0.3939						
					0.86	6.0317	10.800	-0.2311		
15.00	5.2602	0.540	-0.1627		0.86	7.3721	13.200	-0.1880	0.1442	
15.00	6.0395	0.620	-0.1685		0.86	8.3774	15.000	-0.1984		
15.00	7.0136	0.720	-0.1597		0.86	9.7177	17.400	-0.1734	0.1155	
15.00	8.3774	0.860	-0.1984							
15.00	9.7411	1.000	0.2871		1.00	7.0136	10.800	0.2714		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3527	0.3939	
					1.00	9.7411	15.000	0.2871		
BASE PRESSURES					1.00	10.5204	16.200	0.3137		
PORT	CP				1.00	11.2997	17.400	0.3351		
1	-0.4018				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3013									
3	-0.3102									
4	-0.2518									

TABLE AII.- Continued

(a) Continued

RUN 8	POINT 191	MACH 1.62	ALPHA 10.010	BETA 0.0	Q(PSF) 452.6	H0(PSF) 1078.8	P(PSF) 246.4	RE/FT(X10-6) 1.988		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1803	16.20	9.7411	1.000	0.2851		
10.80	3.7873	0.540	-0.1842							
10.80	4.3484	0.620	-0.1803		17.40	6.1018	0.540	-0.1821	0.1970	
10.80	4.7692	0.680	-0.1827		17.40	7.0058	0.620	-0.1908	0.1951	
10.80	4.9095	0.700		0.1871	17.40	8.1358	0.720	-0.2023	0.1829	
10.80	5.0498	0.720	-0.1878		17.40	9.7177	0.860	-0.2065	0.1481	
10.80	6.0317	0.860	-0.2634		17.40	11.2997	1.000	0.3151		
10.80	6.4876	0.925	-0.2623	0.1614						
10.80	6.8032	0.970	-0.2266		19.80	6.9435	0.540	-0.1747	0.1771	
10.80	6.9084	0.985	-0.1541	0.2622	19.80	7.9721	0.620	-0.1990	0.1763	
10.80	7.0136	1.000	0.2286		19.80	9.2580	0.720	-0.2131	0.1569	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1546	0.2071						
13.20	3.9432	0.460	-0.1752		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1885	0.2242	0.54	3.7873	10.800	-0.1842		
13.20	4.9719	0.580	-0.1905		0.54	4.6290	13.200	-0.1885	0.2242	
13.20	5.3148	0.620	-0.1917	0.2258	0.54	5.2602	15.000	-0.1818		
13.20	5.6576	0.660	-0.1930		0.54	6.1018	17.400	-0.1821	0.1970	
13.20	5.8291	0.680	-0.1937		0.54	6.9435	19.800	-0.1747	0.1771	
13.20	6.0005	0.700	-0.1993	0.2154						
13.20	6.1720	0.720	-0.2213		0.62	4.3484	10.800	-0.1803		
13.20	6.3434	0.740	-0.2379		0.62	5.3148	13.200	-0.1917	0.2258	
13.20	6.6863	0.780	-0.2627	0.1994	0.62	6.0395	15.000	-0.1855		
13.20	7.0292	0.820	-0.2519		0.62	7.0058	17.400	-0.1908	0.1951	
13.20	7.3721	0.860	-0.2477	0.1778	0.62	7.9721	19.800	-0.1990	0.1569	
13.20	7.7150	0.900	-0.2408	0.1844						
13.20	7.9293	0.925	-0.2281	0.1958	0.72	5.0498	10.800	-0.1878		
13.20	8.1436	0.950	-0.2131	0.2278	0.72	6.1720	13.200	-0.2213		
13.20	8.3150	0.970	-0.2040	0.2377	0.72	7.0136	15.000	-0.1944		
13.20	8.4436	0.985	-0.1187	0.2922	0.72	8.1358	17.400	-0.2023	0.1829	
13.20	8.5293	0.995	-0.0230	0.4423	0.72	9.2580	19.800	-0.2131	0.1569	
13.20	8.5722	1.000	0.3274	0.3791						
					0.86	6.0317	10.800	-0.2634		
15.00	5.2602	0.540	-0.1818		0.86	7.3721	13.200	-0.2477	0.1778	
15.00	6.0395	0.620	-0.1855		0.86	8.3774	15.000	-0.2221		
15.00	7.0136	0.720	-0.1944		0.86	9.7177	17.400	-0.2065	0.1481	
15.00	8.3774	0.860	-0.2221							
15.00	9.7411	1.000	0.2608		1.00	7.0136	10.800	0.2286		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3274	0.3791	
					1.00	9.7411	15.000	0.2608		
BASE PRESSURES					1.00	10.5204	16.200	0.2851		
					1.00	11.2997	17.400	0.3151		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4125									
2	-0.3172									
3	-0.3135									
4	-0.2560									

(a) Continued

RUN 8	POINT 192	MACH 1.62	ALPHA 10.010	BETA 0.0	Q(PSF) 457.5	H0(PSF) 1090.5	P(PSF) 249.1	RE/FT(X10-6) 2.010		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1730	16.20	9.7411	1.000	0.2767		
10.80	3.7873	0.540	-0.1857							
10.80	4.3484	0.620	-0.1850		17.40	6.1018	0.540	-0.1846	0.1881	
10.80	4.7692	0.680	-0.1870		17.40	7.0058	0.620	-0.1940	0.1889	
10.80	4.9095	0.700		0.1792	17.40	8.1358	0.720	-0.2024	0.1747	
10.80	5.0498	0.720	-0.1908		17.40	9.7177	0.860	-0.2058	0.1405	
10.80	6.0317	0.860	-0.2672		17.40	11.2997	1.000	0.3055		
10.80	6.4876	0.925	-0.2632	0.1580						
10.80	6.8032	0.970	-0.2309		19.80	6.9435	0.540	-0.1814	0.1697	
10.80	6.9084	0.985	-0.1589	0.2572	19.80	7.9721	0.620	-0.2018	0.1694	
10.80	7.0136	1.000	0.2241		19.80	9.2580	0.720	-0.2229	0.1499	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1531	0.2019						
13.20	3.9432	0.460	-0.1776		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1821	0.2149	0.54	3.7873	10.800	-0.1857		
13.20	4.9719	0.580	-0.1913		0.54	4.6290	13.200	-0.1821	0.2149	
13.20	5.3148	0.620	-0.1819	0.2183	0.54	5.2602	15.000	-0.1857		
13.20	5.6576	0.660	-0.1825		0.54	6.1018	17.400	-0.1846	0.1881	
13.20	5.8291	0.680	-0.1888		0.54	6.9435	19.800	-0.1814	0.1697	
13.20	6.0005	0.700	-0.1906	0.2011						
13.20	6.1720	0.720	-0.1909		0.62	4.3484	10.800	-0.1850		
13.20	6.3434	0.740	-0.2003		0.62	5.3148	13.200	-0.1819	0.2183	
13.20	6.6863	0.780	-0.2505	0.1931	0.62	6.0395	15.000	-0.1902		
13.20	7.0292	0.820	-0.2588		0.62	7.0058	17.400	-0.1940	0.1889	
13.20	7.3721	0.860	-0.2266	0.1717	0.62	7.9721	19.800	-0.2018	0.1499	
13.20	7.7150	0.900	-0.2430	0.1810						
13.20	7.9293	0.925	-0.2368	0.1910	0.72	5.0498	10.800	-0.1908		
13.20	8.1436	0.950	-0.2170	0.2266	0.72	6.1720	13.200	-0.1909		
13.20	8.3150	0.970	-0.2088	0.2359	0.72	7.0136	15.000	-0.2052		
13.20	8.4436	0.985	-0.1256	0.2880	0.72	8.1358	17.400	-0.2024	0.1747	
13.20	8.5293	0.995	-0.0231	0.4340	0.72	9.2580	19.800	-0.2229	0.1499	
13.20	8.5722	1.000	0.3158	0.3664						
					0.86	6.0317	10.800	-0.2672		
15.00	5.2602	0.540	-0.1857		0.86	7.3721	13.200	-0.2266	0.1717	
15.00	6.0395	0.620	-0.1902		0.86	8.3774	15.000	-0.2331		
15.00	7.0136	0.720	-0.2052		0.86	9.7177	17.400	-0.2058	0.1405	
15.00	8.3774	0.860	-0.2331							
15.00	9.7411	1.000	0.2517		1.00	7.0136	10.800	0.2241		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3158	0.3664	
					1.00	9.7411	15.000	0.2517		
					1.00	10.5204	16.200	0.2767		
					1.00	11.2997	17.400	0.3055		
					ETA	Y	X	CP-UP	CP-LOW	
								</		

TABLE AII.- Continued

(a) Continued

RUN 8	POINT 193	MACH 1.62	ALPHA 11.030	BETA 0.0	Q(PSF) 453.3	H0(PSF) 1080.3	P(PSF) 246.7	RE/FT(X10-6) 1.991		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2043	16.20	9.7411	1.000	0.2564		
10.80	3.7873	0.540	-0.1992							
10.80	4.3484	0.620	-0.2226		17.40	6.1018	0.540	-0.2000	0.2186	
10.80	4.7692	0.680	-0.2039		17.40	7.0058	0.620	-0.2100	0.2191	
10.80	4.9095	0.700		0.2125	17.40	8.1358	0.720	-0.2605	0.2102	
10.80	5.0498	0.720	-0.2229		17.40	9.7177	0.860	-0.2347	0.1841	
10.80	6.0317	0.860	-0.3097		17.40	11.2997	1.000	0.2964		
10.80	6.4876	0.925	-0.3042	0.2015						
10.80	6.8032	0.970	-0.2579		19.80	6.9435	0.540	-0.1952	0.2030	
10.80	6.9084	0.985	-0.1868	0.3116	19.80	7.9721	0.620	-0.2218	0.1998	
10.80	7.0136	1.000	0.1917		19.80	9.2580	0.720	-0.2627	0.1804	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1641	0.2335						
13.20	3.9432	0.460	-0.1813		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1983	0.2506	0.54	3.7873	10.800	-0.1992		
13.20	4.9719	0.580	-0.2041		0.54	4.6290	13.200	-0.1983	0.2506	
13.20	5.3148	0.620	-0.2053	0.2493	0.54	5.2602	15.000	-0.2038		
13.20	5.6576	0.660	-0.2073		0.54	6.1018	17.400	-0.2000	0.2186	
13.20	5.8291	0.680	-0.2093		0.54	6.9435	19.800	-0.1952	0.2030	
13.20	6.0005	0.700	-0.2254	0.2406						
13.20	6.1720	0.720	-0.2506		0.62	4.3484	10.800	-0.2226		
13.20	6.3434	0.740	-0.2499		0.62	5.3148	13.200	-0.2053	0.2493	
13.20	6.6863	0.780	-0.2771	0.2285	0.62	6.0395	15.000	-0.2050		
13.20	7.0292	0.820	-0.2790		0.62	7.0058	17.400	-0.2100	0.2191	
13.20	7.3721	0.860	-0.2701	0.2119	0.62	7.9721	19.800	-0.2218	0.1804	
13.20	7.7150	0.900	-0.2735	0.2247						
13.20	7.9293	0.925	-0.2580	0.2377	0.72	5.0498	10.800	-0.2229		
13.20	8.1436	0.950	-0.2497	0.2706	0.72	6.1720	13.200	-0.2506		
13.20	8.3150	0.970	-0.2421	0.2908	0.72	7.0136	15.000	-0.2685		
13.20	8.4436	0.985	-0.1640	0.3553	0.72	8.1358	17.400	-0.2605	0.2102	
13.20	8.5293	0.995	-0.0654	0.4701	0.72	9.2580	19.800	-0.2627	0.1804	
13.20	8.5722	1.000	0.3053	0.3696						
					0.86	6.0317	10.800	-0.3097		
15.00	5.2602	0.540	-0.2038		0.86	7.3721	13.200	-0.2701	0.2119	
15.00	6.0395	0.620	-0.2050		0.86	8.3774	15.000	-0.2570		
15.00	7.0136	0.720	-0.2685		0.86	9.7177	17.400	-0.2347	0.1841	
15.00	8.3774	0.860	-0.2570							
15.00	9.7411	1.000	0.2297		1.00	7.0136	10.800	0.1917		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3053	0.3696	
					1.00	9.7411	15.000	0.2297		
BASE PRESSURES					1.00	10.5204	16.200	0.2564		
					1.00	11.2997	17.400	0.2964		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4109									
2	-0.3262									
3	-0.3255									
4	-0.2569									

(a) Concluded

RUN 8	POINT 194	MACH 1.62	ALPHA 12.030	BETA 0.0	Q(PSF) 452.6	H0(PSF) 1078.6	P(PSF) 246.3	RE/FT(X10-6) 1.988		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2291	16.20	9.7411	1.000	0.2402		
10.80	3.7873	0.540	-0.2137							
10.80	4.3484	0.620	-0.2237		17.40	6.1018	0.540	-0.2168	0.2427	
10.80	4.7692	0.680	-0.2404		17.40	7.0058	0.620	-0.2354	0.2451	
10.80	4.9095	0.700		0.2389	17.40	8.1358	0.720	-0.2876	0.2349	
10.80	5.0498	0.720	-0.3017		17.40	9.7177	0.860	-0.2636	0.2139	
10.80	6.0317	0.860	-0.3381		17.40	11.2997	1.000	0.2751		
10.80	6.4876	0.925	-0.3203	0.2382						
10.80	6.8032	0.970	-0.2803		19.80	6.9435	0.540	-0.2147	0.2296	
10.80	6.9084	0.985	-0.2085	0.3609	19.80	7.9721	0.620	-0.2573	0.2282	
10.80	7.0136	1.000	0.1615		19.80	9.2580	0.720	-0.2865	0.2063	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1790	0.2612						
13.20	3.9432	0.460	-0.2156		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2282	0.2749	0.54	3.7873	10.800	-0.2137		
13.20	4.9719	0.580	-0.2368		0.54	4.6290	13.200	-0.2282	0.2749	
13.20	5.3148	0.620	-0.2502	0.2749	0.54	5.2602	15.000	-0.2207		
13.20	5.6576	0.660	-0.2619		0.54	6.1018	17.400	-0.2168	0.2427	
13.20	5.8291	0.680	-0.2782		0.54	6.9435	19.800	-0.2147	0.2296	
13.20	6.0005	0.700	-0.3015	0.2652						
13.20	6.1720	0.720	-0.3141		0.62	4.3484	10.800	-0.2237		
13.20	6.3434	0.740	-0.3142		0.62	5.3148	13.200	-0.2502	0.2749	
13.20	6.6863	0.780	-0.3153	0.2569	0.62	6.0395	15.000	-0.2328		
13.20	7.0292	0.820	-0.3108		0.62	7.0058	17.400	-0.2354	0.2451	
13.20	7.3721	0.860	-0.2872	0.2428	0.62	7.9721	19.800	-0.2573	0.2063	
13.20	7.7150	0.900	-0.2998	0.2634						
13.20	7.9293	0.925	-0.2894	0.2755	0.72	5.0498	10.800	-0.3017		
13.20	8.1436	0.950	-0.2832	0.3133	0.72	6.1720	13.200	-0.3141		
13.20	8.3150	0.970	-0.2778	0.3350	0.72	7.0136	15.000	-0.3060		
13.20	8.4436	0.985	-0.2037	0.3974	0.72	8.1358	17.400	-0.2876	0.2349	
13.20	8.5293	0.995	-0.1079	0.4940	0.72	9.2580	19.800	-0.2865	0.2063	
13.20	8.5722	1.000	0.2798	0.3482						
					0.86	6.0317	10.800	-0.3381		
15.00	5.2602	0.540	-0.2207		0.86	7.3721	13.200	-0.2872	0.2428	
15.00	6.0395	0.620	-0.2328		0.86	8.3774	15.000	-0.2799		
15.00	7.0136	0.720	-0.3060		0.86	9.7177	17.400	-0.2636	0.2139	
15.00	8.3774	0.860	-0.2799							
15.00	9.7411	1.000	0.2018		1.00	7.0136	10.800	0.1615		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2798	0.3482	
					1.00	9.7411	15.000	0.2018		
BASE PRESSURES					1.00	10.5204	16.200	0.2402		
PORT	CP				1.00	11.2997	17.400	0.2751		
1	-0.4103				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3622									
3	-0.3453									
4	-0.2567									

(b) $\delta_c = -5^\circ$

APPENDIX A

TABLE AII.- Continued

(b) Continued

RUN 6	POINT 126	MACH 1.62	ALPHA 6.010	BETA 0.0	Q(PSF) 455.4	H0(PSF) 1085.3	P(PSF) 247.9	RE/FT(X10-6) 2.000		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1031	16.20	9.7411	1.000	0.3840		
10.80	3.7873	0.540	-0.1154							
10.80	4.3484	0.620	-0.1360		17.40	6.1018	0.540	-0.1039	0.1045	
10.80	4.7692	0.680	-0.1151		17.40	7.0058	0.620	-0.1013	0.1036	
10.80	4.9095	0.700		0.1076	17.40	8.1358	0.720	-0.0726	0.0843	
10.80	5.0498	0.720	-0.1085		17.40	9.7177	0.860	-0.0372	0.0169	
10.80	6.0317	0.860	-0.0848		17.40	11.2997	1.000	0.3940		
10.80	6.4876	0.925	-0.1000	0.0163						
10.80	6.8032	0.970	-0.1028		19.80	6.9435	0.540	-0.0970	0.0900	
10.80	6.9084	0.985	0.0102	0.0284	19.80	7.9721	0.620	-0.1039	0.0863	
10.80	7.0136	1.000	0.3688		19.80	9.2580	0.720	-0.0781	0.0603	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.0834	0.1222		ETA	Y	X	CP-UP	CP-LOW
13.20	3.9432	0.460	-0.0974			0.54	3.7873	10.800	-0.1154	
13.20	4.6290	0.540	-0.1109	0.1365		0.54	4.6290	13.200	-0.1109	0.1365
13.20	4.9719	0.580	-0.1143			0.54	5.2602	15.000	-0.1048	
13.20	5.3148	0.620	-0.1140	0.1375		0.54	6.1018	17.400	-0.1039	0.1045
13.20	5.6576	0.660	-0.1036			0.54	6.9435	19.800	-0.0970	0.0900
13.20	5.8291	0.680	-0.1058							
13.20	6.0005	0.700	-0.0990	0.1179						
13.20	6.1720	0.720	-0.0823		0.62	4.3484	10.800	-0.1360		
13.20	6.3434	0.740	-0.0896		0.62	5.3148	13.200	-0.1140	0.1375	
13.20	6.6863	0.780	-0.0921	0.0943	0.62	6.0395	15.000	-0.1062		
13.20	7.0292	0.820	-0.0778		0.62	7.0058	17.400	-0.1013	0.1036	
13.20	7.3721	0.860	-0.0744	0.0442	0.62	7.9721	19.800	-0.1039	0.0603	
13.20	7.7150	0.900	-0.0800	0.0328						
13.20	7.9293	0.925	-0.0709	0.0254	0.72	5.0498	10.800	-0.1085		
13.20	8.1436	0.950	-0.0590	-0.0183	0.72	6.1720	13.200	-0.0823		
13.20	8.3150	0.970	-0.0697	0.0074	0.72	7.0136	15.000	-0.0921		
13.20	8.4436	0.985	0.0935	0.0087	0.72	8.1358	17.400	-0.0726	0.0843	
13.20	8.5293	0.995	0.1661	0.2748	0.72	9.2580	19.800	-0.0781	0.0603	
13.20	8.5722	1.000	0.4109	0.4083						
					0.86	6.0317	10.800	-0.0848		
15.00	5.2602	0.540	-0.1048		0.86	7.3721	13.200	-0.0744	0.0442	
15.00	6.0395	0.620	-0.1062		0.86	8.3774	15.000	-0.0613		
15.00	7.0136	0.720	-0.0921		0.86	9.7177	17.400	-0.0372	0.0169	
15.00	8.3774	0.860	-0.0613							
15.00	9.7411	1.000	0.3716		1.00	7.0136	10.800	0.3688		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.4109	0.4083	
					1.00	9.7411	15.000	0.3716		
BASE PRESSURES					1.00	10.5204	16.200	0.3840		
PORT	CP				1.00	11.2997	17.400	0.3940		
1	-0.3768				ETA	Y	X	CP-UP	CP-LOW	
2	-0.2783									
3	-0.3075									
4	-0.2480									

TABLE AII.- Continued

(b) Continued

RUN 6	POINT 127	MACH 1.62	ALPHA 4.010	BETA 0.0	Q(PSF) 455.2	H0(PSF) 1084.9	P(PSF) 247.8	RE/FT(X10-6) 2.000		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0698	16.20	9.7411	1.000	0.4098		
10.80	3.7873	0.540	-0.0829							
10.80	4.3484	0.620	-0.0721		17.40	6.1018	0.540	-0.0624	0.0630	
10.80	4.7692	0.680	-0.0715		17.40	7.0058	0.620	-0.0519	0.0611	
10.80	4.9095	0.700		0.0620	17.40	8.1358	0.720	-0.0091	0.0385	
10.80	5.0498	0.720	-0.0586		17.40	9.7177	0.860	0.0318	-0.0403	
10.80	6.0317	0.860	-0.0125		17.40	11.2997	1.000	0.4132		
10.80	6.4876	0.925	-0.0030	-0.1000						
10.80	6.8032	0.970	0.0005		19.80	6.9435	0.540	-0.0534	0.0485	
10.80	6.9084	0.985	0.1050	-0.0965	19.80	7.9721	0.620	-0.0528	0.0435	
10.80	7.0136	1.000	0.4085		19.80	9.2580	0.720	-0.0214	0.0178	
	X		Y		ETA		CP-UP		CP-LOW	
13.20	3.4289	0.400	-0.0517	0.0843						
13.20	3.9432	0.460	-0.0649		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0726	0.0953	0.54	3.7873	10.800	-0.0829		
13.20	4.9719	0.580	-0.0733		0.54	4.6290	13.200	-0.0726	0.0953	
13.20	5.3148	0.620	-0.0682	0.0946	0.54	5.2602	15.000	-0.0653		
13.20	5.6576	0.660	-0.0559		0.54	6.1018	17.400	-0.0624	0.0630	
13.20	5.8291	0.680	-0.0562		0.54	6.9435	19.800	-0.0534	0.0485	
13.20	6.0005	0.700	-0.0464	0.0723						
13.20	6.1720	0.720	-0.0453		0.62	4.3484	10.800	-0.0721		
13.20	6.3434	0.740	-0.0415		0.62	5.3148	13.200	-0.0682	0.0946	
13.20	6.6863	0.780	-0.0348	0.0370	0.62	6.0395	15.000	-0.0604		
13.20	7.0292	0.820	-0.0225		0.62	7.0058	17.400	-0.0519	0.0611	
13.20	7.3721	0.860	-0.0135	-0.0298	0.62	7.9721	19.800	-0.0528	0.0178	
13.20	7.7150	0.900	0.0088	-0.0881						
13.20	7.9293	0.925	0.0228	-0.1228	0.72	5.0498	10.800	-0.0586		
13.20	8.1436	0.950	0.0434	-0.1427	0.72	6.1720	13.200	-0.0453		
13.20	8.3150	0.970	0.0553	-0.1475	0.72	7.0136	15.000	-0.0374		
13.20	8.4436	0.985	0.1921	-0.1521	0.72	8.1358	17.400	-0.0091	0.0385	
13.20	8.5293	0.995	0.2593	0.1853	0.72	9.2580	19.800	-0.0214	0.0178	
13.20	8.5722	1.000	0.4265	0.4052						
					0.86	6.0317	10.800	-0.0125		
15.00	5.2602	0.540	-0.0653		0.86	7.3721	13.200	-0.0135	-0.0298	
15.00	6.0395	0.620	-0.0604		0.86	8.3774	15.000	0.0062		
15.00	7.0136	0.720	-0.0374		0.86	9.7177	17.400	0.0318	-0.0403	
15.00	8.3774	0.860	0.0062							
15.00	9.7411	1.000	0.4045		1.00	7.0136	10.800	0.4085		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.4265	0.4052	
					1.00	9.7411	15.000	0.4045		
BASE PRESSURES					1.00	10.5204	16.200	0.4098		
					1.00	11.2997	17.400	0.4132		
PORT	CP									
1	-0.3704									
2	-0.2988									
3	-0.3075									
4	-0.2548									

TABLE AII.- Continued

(b) Continued

RUN 6	POINT 128	MACH 1.62	ALPHA 2.010	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1085.9	P(PSF) 248.0	RE/FT(X10-6) 2.002	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.0371	16.20	9.7411	1.000	0.4234	
10.80	3.7873	0.540	-0.0473						
10.80	4.3484	0.620	-0.0373		17.40	6.1018	0.540	-0.0224	0.0235
10.80	4.7692	0.680	-0.0232		17.40	7.0058	0.620	-0.0043	0.0207
10.80	4.9095	0.700		0.0164	17.40	8.1358	0.720	0.0378	-0.0016
10.80	5.0498	0.720	-0.0092		17.40	9.7177	0.860	0.0981	-0.2194
10.80	6.0317	0.860	0.0558		17.40	11.2997	1.000	0.4187	
10.80	6.4876	0.925	0.0781	-0.2179					
10.80	6.8032	0.970	0.0975		19.80	6.9435	0.540	-0.0142	0.0087
10.80	6.9084	0.985	0.1823	-0.2105	19.80	7.9721	0.620	-0.0043	0.0033
10.80	7.0136	1.000	0.4251		19.80	9.2580	0.720	0.0340	-0.0256
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.0178	0.0473					
13.20	3.9432	0.460	-0.0315		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.0350	0.0559	0.54	3.7873	10.800	-0.0473	
13.20	4.9719	0.580	-0.0336		0.54	4.6290	13.200	-0.0350	0.0559
13.20	5.3148	0.620	-0.0290	0.0534	0.54	5.2602	15.000	-0.0235	
13.20	5.6576	0.660	-0.0098		0.54	6.1018	17.400	-0.0224	0.0235
13.20	5.8291	0.680	0.0077		0.54	6.9435	19.800	-0.0142	0.0087
13.20	6.0005	0.700	-0.0025	0.0226					
13.20	6.1720	0.720	-0.0034		0.62	4.3484	10.800	-0.0373	
13.20	6.3434	0.740	0.0178		0.62	5.3148	13.200	-0.0290	0.0534
13.20	6.6863	0.780	0.0227	-0.0189	0.62	6.0395	15.000	-0.0090	
13.20	7.0292	0.820	0.0385		0.62	7.0058	17.400	-0.0043	0.0207
13.20	7.3721	0.860	0.0511	-0.1621	0.62	7.9721	19.800	-0.0043	-0.0256
13.20	7.7150	0.900	0.0776	-0.2238					
13.20	7.9293	0.925	0.0968	-0.2408	0.72	5.0498	10.800	-0.0092	
13.20	8.1436	0.950	0.1213	-0.2568	0.72	6.1720	13.200	-0.0034	
13.20	8.3150	0.970	0.1663	-0.2683	0.72	7.0136	15.000	0.0150	
13.20	8.4436	0.985	0.2732	-0.2515	0.72	8.1358	17.400	0.0378	-0.0016
13.20	8.5293	0.995	0.3386	0.1088	0.72	9.2580	19.800	0.0340	-0.0256
13.20	8.5722	1.000	0.4217	0.3843					
					0.86	6.0317	10.800	0.0558	
15.00	5.2602	0.540	-0.0235		0.86	7.3721	13.200	0.0511	-0.1621
15.00	6.0395	0.620	-0.0090		0.86	8.3774	15.000	0.0753	
15.00	7.0136	0.720	0.0150		0.86	9.7177	17.400	0.0981	-0.2194
15.00	8.3774	0.860	0.0753						
15.00	9.7411	1.000	0.4203		1.00	7.0136	10.800	0.4251	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.4217	0.3843
					1.00	9.7411	15.000	0.4203	
BASE PRESSURES					1.00	10.5204	16.200	0.4234	
PORT	CP								
1	-0.3924								
2	-0.3192								
3	-0.3095								
4	-0.2620								

TABLE AII.- Continued

(b) Continued

RUN 6	POINT 129	MACH 1.62	ALPHA 9.030	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1085.8	P(PSF) 248.0	RE/FT(X10-6) 2.001		
.X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1652	16.20	9.7411	1.000	0.3191		
10.80	3.7873	0.540	-0.1716							
10.80	4.3484	0.620	-0.1876		17.40	6.1018	0.540	-0.1618	0.1747	
10.80	4.7692	0.680	-0.1836		17.40	7.0058	0.620	-0.1725	0.1742	
10.80	4.9095	0.700		0.1712	17.40	8.1358	0.720	-0.1713	0.1571	
10.80	5.0498	0.720	-0.1821		17.40	9.7177	0.860	-0.1680	0.1181	
10.80	6.0317	0.860	-0.2204		17.40	11.2997	1.000	0.3392		
10.80	6.4876	0.925	-0.2209	0.1393						
10.80	6.8032	0.970	-0.1902		19.80	6.9435	0.540	-0.1544	0.1553	
10.80	6.9084	0.985	-0.1024	0.2231	19.80	7.9721	0.620	-0.1798	0.1553	
10.80	7.0136	1.000	0.2779		19.80	9.2580	0.720	-0.1759	0.1343	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1325	0.1864						
13.20	3.9432	0.460	-0.1544		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1666	0.2026	0.54	3.7873	10.800	-0.1716		
13.20	4.9719	0.580	-0.1754		0.54	4.6290	13.200	-0.1666	0.2026	
13.20	5.3148	0.620	-0.1786	0.2028	0.54	5.2602	15.000	-0.1647		
13.20	5.6576	0.660	-0.1721		0.54	6.1018	17.400	-0.1618	0.1747	
13.20	5.8291	0.680	-0.1765		0.54	6.9435	19.800	-0.1544	0.1553	
13.20	6.0005	0.700	-0.1805	0.1870						
13.20	6.1720	0.720	-0.1768		0.62	4.3484	10.800	-0.1876		
13.20	6.3434	0.740	-0.1796		0.62	5.3148	13.200	-0.1786	0.2028	
13.20	6.6863	0.780	-0.2131	0.1753	0.62	6.0395	15.000	-0.1765		
13.20	7.0292	0.820	-0.2099		0.62	7.0058	17.400	-0.1725	0.1742	
13.20	7.3721	0.860	-0.2087	0.1502	0.62	7.9721	19.800	-0.1798	0.1343	
13.20	7.7150	0.900	-0.2012	0.1538						
13.20	7.9293	0.925	-0.1966	0.1617	0.72	5.0498	10.800	-0.1821		
13.20	8.1436	0.950	-0.1819	0.1778	0.72	6.1720	13.200	-0.1768		
13.20	8.3150	0.970	-0.1525	0.1934	0.72	7.0136	15.000	-0.1785		
13.20	8.4436	0.985	-0.0597	0.2453	0.72	8.1358	17.400	-0.1713	0.1571	
13.20	8.5293	0.995	0.0254	0.4163	0.72	9.2580	19.800	-0.1759	0.1343	
13.20	8.5722	1.000	0.3586	0.3984						
					0.86	6.0317	10.800	-0.2204		
15.00	5.2602	0.540	-0.1647		0.86	7.3721	13.200	-0.2087	0.1502	
15.00	6.0395	0.620	-0.1765		0.86	8.3774	15.000	-0.1890		
15.00	7.0136	0.720	-0.1785		0.86	9.7177	17.400	-0.1680	0.1181	
15.00	8.3774	0.860	-0.1890							
15.00	9.7411	1.000	0.2946		1.00	7.0136	10.800	0.2779		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3586	0.3984	
					1.00	9.7411	15.000	0.2946		
BASE PRESSURES					1.00	10.5204	16.200	0.3191		
					1.00	11.2997	17.400	0.3392		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.3980									
2	-0.3029									
3	-0.3093									
4	-0.2503									

(b) Continued

RUN 6	POINT 130	MACH 1.62	ALPHA 10.020	BETA 0.0	Q(PSF) 455.5	H0(PSF) 1085.7	P(PSF) 248.0	RE/FT(X10-6) 2.001		
X	Y	ETA	CP-UP	CP-LON	X	Y	ETA	CP-UP	CP-LON	
10.80	2.8054	0.400		0.1882	16.20	9.7411	1.000	0.2901		
10.80	3.7873	0.540	-0.1931							
10.80	4.3484	0.620	-0.2007		17.40	6.1018	0.540	-0.1822	0.1976	
10.80	4.7692	0.680	-0.2050		17.40	7.0058	0.620	-0.1972	0.1966	
10.80	4.9095	0.700		0.1941	17.40	8.1358	0.720	-0.2255	0.1812	
10.80	5.0498	0.720	-0.2144		17.40	9.7177	0.860	-0.2006	0.1469	
10.80	6.0317	0.860	-0.2533		17.40	11.2997	1.000	0.3128		
10.80	6.4876	0.925	-0.2440	0.1779						
10.80	6.8032	0.970	-0.2158		19.80	6.9435	0.540	-0.1771	0.1806	
10.80	6.9084	0.985	-0.1485	0.2740	19.80	7.9721	0.620	-0.2011	0.1791	
10.80	7.0136	1.000	0.2453		19.80	9.2580	0.720	-0.2252	0.1567	
					X	Y	ETA	CP-UP	CP-LON	
13.20	3.4289	0.400	-0.1475	0.2117						
13.20	3.9432	0.460	-0.1641		ETA	Y	X	CP-UP	CP-LON	
13.20	4.6290	0.540	-0.1874	0.2223	0.54	3.7873	10.800	-0.1931		
13.20	4.9719	0.580	-0.1977		0.54	4.6290	13.200	-0.1874	0.2223	
13.20	5.3148	0.620	-0.1992	0.2273	0.54	5.2602	15.000	-0.1863		
13.20	5.6576	0.660	-0.2019		0.54	6.1018	17.400	-0.1822	0.1976	
13.20	5.8291	0.680	-0.1990		0.54	6.9435	19.800	-0.1771	0.1806	
13.20	6.0005	0.700	-0.2143	0.2155						
13.20	6.1720	0.720	-0.2247		0.62	4.3484	10.800	-0.2007		
13.20	6.3434	0.740	-0.2475		0.62	5.3148	13.200	-0.1992	0.2273	
13.20	6.6863	0.780	-0.2426	0.1990	0.62	6.0395	15.000	-0.1975		
13.20	7.0292	0.820	-0.2420		0.62	7.0058	17.400	-0.1972	0.1966	
13.20	7.3721	0.860	-0.2415	0.1802	0.62	7.9721	19.800	-0.2011	0.1567	
13.20	7.7150	0.900	-0.2344	0.1940						
13.20	7.9293	0.925	-0.2242	0.2029	0.72	5.0498	10.800	-0.2144		
13.20	8.1436	0.950	-0.2068	0.2350	0.72	6.1720	13.200	-0.2247		
13.20	8.3150	0.970	-0.1922	0.2493	0.72	7.0136	15.000	-0.2397		
13.20	8.4436	0.985	-0.1050	0.3002	0.72	8.1358	17.400	-0.2255	0.1812	
13.20	8.5293	0.995	-0.0122	0.4501	0.72	9.2580	19.800	-0.2252	0.1567	
13.20	8.5722	1.000	0.3430	0.3878						
					0.86	6.0317	10.800	-0.2533		
15.00	5.2602	0.540	-0.1863		0.86	7.3721	13.200	-0.2415	0.1802	
15.00	6.0395	0.620	-0.1975		0.86	8.3774	15.000	-0.2238		
15.00	7.0136	0.720	-0.2397		0.86	9.7177	17.400	-0.2006	0.1469	
15.00	8.3774	0.860	-0.2238							
15.00	9.7411	1.000	0.2650		1.00	7.0136	10.800	0.2453		
X	Y	ETA	CP-UP	CP-LON	1.00	8.5722	13.200	0.3430	0.3878	
					1.00	9.7411	15.000	0.2650		
BASE PRESSURES					1.00	10.5204	16.200	0.2901		
PORT		CP			1.00	11.2997	17.400	0.3128		
1		-0.4141			ETA	Y	X	CP-UP	CP-LON	
2		-0.3122								
3		-0.3136								
4		-0.2546								

TABLE AII.- Continued

(b) Continued

RUN 6	POINT 131	MACH 1.62	ALPHA 11.020	BETA 0.0	Q(PSF) 455.4	H0(PSF) 1085.4	P(PSF) 247.9	RE/FT(X10-6) 2.001		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2113	16.20	9.7411	1.000	0.2623		
10.80	3.7873	0.540	-0.2117							
10.80	4.3484	0.620	-0.2330		17.40	6.1018	0.540	-0.1962	0.2224	
10.80	4.7692	0.680	-0.2335		17.40	7.0058	0.620	-0.2270	0.2222	
10.80	4.9095	0.700		0.2196	17.40	8.1358	0.720	-0.2473	0.2101	
10.80	5.0498	0.720	-0.2760		17.40	9.7177	0.860	-0.2256	0.1823	
10.80	6.0317	0.860	-0.2860		17.40	11.2997	1.000	0.3000		
10.80	6.4876	0.925	-0.2753	0.2107						
10.80	6.8032	0.970	-0.2460		19.80	6.9435	0.540	-0.1949	0.2055	
10.80	6.9084	0.985	-0.1954	0.3236	19.80	7.9721	0.620	-0.2351	0.2046	
10.80	7.0136	1.000	0.2085		19.80	9.2580	0.720	-0.2549	0.1850	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1612	0.2365						
13.20	3.9432	0.460	-0.1830		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2048	0.2502	0.54	3.7873	10.800	-0.2117		
13.20	4.9719	0.580	-0.2179		0.54	4.6290	13.200	-0.2048	0.2502	
13.20	5.3148	0.620	-0.2309	0.2511	0.54	5.2602	15.000	-0.2027		
13.20	5.6576	0.660	-0.2392		0.54	6.1018	17.400	-0.1962	0.2224	
13.20	5.8291	0.680	-0.2516		0.54	6.9435	19.800	-0.1949	0.2055	
13.20	6.0005	0.700	-0.2688	0.2411						
13.20	6.1720	0.720	-0.2725		0.62	4.3484	10.800	-0.2330		
13.20	6.3434	0.740	-0.2805		0.62	5.3148	13.200	-0.2309	0.2511	
13.20	6.6863	0.780	-0.2698	0.2303	0.62	6.0395	15.000	-0.2216		
13.20	7.0292	0.820	-0.2678		0.62	7.0058	17.400	-0.2270	0.2222	
13.20	7.3721	0.860	-0.2643	0.2132	0.62	7.9721	19.800	-0.2351	0.1850	
13.20	7.7150	0.900	-0.2592	0.2271						
13.20	7.9293	0.925	-0.2496	0.2398	0.72	5.0498	10.800	-0.2760		
13.20	8.1436	0.950	-0.2416	0.2745	0.72	6.1720	13.200	-0.2725		
13.20	8.3150	0.970	-0.2294	0.2898	0.72	7.0136	15.000	-0.2712		
13.20	8.4436	0.985	-0.1632	0.3572	0.72	8.1358	17.400	-0.2473	0.2101	
13.20	8.5293	0.995	-0.0576	0.4757	0.72	9.2580	19.800	-0.2549	0.1850	
13.20	8.5722	1.000	0.3079	0.3700						
					0.86	6.0317	10.800	-0.2860		
15.00	5.2602	0.540	-0.2027		0.86	7.3721	13.200	-0.2643	0.2132	
15.00	6.0395	0.620	-0.2216		0.86	8.3774	15.000	-0.2504		
15.00	7.0136	0.720	-0.2712		0.86	9.7177	17.400	-0.2256	0.1823	
15.00	8.3774	0.860	-0.2504							
15.00	9.7411	1.000	0.2389		1.00	7.0136	10.800	0.2085		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3079	0.3700	
					1.00	9.7411	15.000	0.2389		
BASE PRESSURES					1.00	10.5204	16.200	0.2623		
					1.00	11.2997	17.400	0.3000		
					ETA	Y	X	CP-UP	CP-LOW	
PORT	CP									
1	-0.4108									
2	-0.3213									
3	-0.3282									
4	-0.2547									

TABLE AII.- Continued

(b) Concluded

RUN 6	POINT 132	MACH 1.62	ALPHA 12.010	BETA 0.0	Q(PSF) 455.4	H0(PSF) 1085.4	P(PSF) 247.9	RE/FT(X10-6) 2.001		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2363	16.20	9.7411	1.000	0.2365		
10.80	3.7873	0.540	-0.2286							
10.80	4.3484	0.620	-0.2744		17.40	6.1018	0.540	-0.2150	0.2468	
10.80	4.7692	0.680	-0.2773		17.40	7.0058	0.620	-0.2840	0.2474	
10.80	4.9095	0.700		0.2448	17.40	8.1358	0.720	-0.2748	0.2359	
10.80	5.0498	0.720	-0.3157		17.40	9.7177	0.860	-0.2565	0.2120	
10.80	6.0317	0.860	-0.3180		17.40	11.2997	1.000	0.2774		
10.80	6.4876	0.925	-0.3081	0.2526						
10.80	6.8032	0.970	-0.2773		19.80	6.9435	0.540	-0.2153	0.2287	
10.80	6.9084	0.985	-0.2331	0.3769	19.80	7.9721	0.620	-0.2986	0.2280	
10.80	7.0136	1.000	0.1680		19.80	9.2580	0.720	-0.2824	0.2089	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1744	0.2616						
13.20	3.9432	0.460	-0.1953		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2252	0.2748	0.54	3.7873	10.800	-0.2286		
13.20	4.9719	0.580	-0.2369		0.54	4.6290	13.200	-0.2252	0.2748	
13.20	5.3148	0.620	-0.2437	0.2746	0.54	5.2602	15.000	-0.2212		
13.20	5.6576	0.660	-0.2782		0.54	6.1018	17.400	-0.2150	0.2468	
13.20	5.8291	0.680	-0.3052		0.54	6.9435	19.800	-0.2153	0.2287	
13.20	6.0005	0.700	-0.3072	0.2631						
13.20	6.1720	0.720	-0.3048		0.62	4.3484	10.800	-0.2744		
13.20	6.3434	0.740	-0.3077		0.62	5.3148	13.200	-0.2437	0.2746	
13.20	6.6863	0.780	-0.2988	0.2583	0.62	6.0395	15.000	-0.2570		
13.20	7.0292	0.820	-0.2971		0.62	7.0058	17.400	-0.2840	0.2474	
13.20	7.3721	0.860	-0.2905	0.2453	0.62	7.9721	19.800	-0.2986	0.2089	
13.20	7.7150	0.900	-0.2864	0.2673						
13.20	7.9293	0.925	-0.2823	0.2748	0.72	5.0498	10.800	-0.3157		
13.20	8.1436	0.950	-0.2734	0.3162	0.72	6.1720	13.200	-0.3048		
13.20	8.3150	0.970	-0.2690	0.3422	0.72	7.0136	15.000	-0.2979		
13.20	8.4436	0.985	-0.1975	0.3991	0.72	8.1358	17.400	-0.2748	0.2359	
13.20	8.5293	0.995	-0.0997	0.4965	0.72	9.2580	19.800	-0.2824	0.2089	
13.20	8.5722	1.000	0.2856	0.3573						
					0.86	6.0317	10.800	-0.3180		
15.00	5.2602	0.540	-0.2212		0.86	7.3721	13.200	-0.2905	0.2453	
15.00	6.0395	0.620	-0.2570		0.86	8.3774	15.000	-0.2744		
15.00	7.0136	0.720	-0.2979		0.86	9.7177	17.400	-0.2565	0.2120	
15.00	8.3774	0.860	-0.2744							
15.00	9.7411	1.000	0.2110		1.00	7.0136	10.800	0.1680		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2856	0.3573	
					1.00	9.7411	15.000	0.2110		
BASE PRESSURES					1.00	10.5204	16.200	0.2365		
PORT	CP				1.00	11.2997	17.400	0.2774		
1	-0.4090				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3539									
3	-0.3461									
4	-0.2541									

TABLE AII.- Continued

(c) $\delta_c = -10^\circ$

RUN 7	POINT 142	MACH 1.62	ALPHA 7.990	BETA 0.0	Q(PSF) 456.3	H0(PSF) 1087.4	P(PSF) 248.4	RE/FT(X10-6) 2.004		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1466	16.20	9.7411	1.000	0.3450		
10.80	3.7873	0.540	-0.1586							
10.80	4.3484	0.620	-0.1762		17.40	6.1018	0.540	-0.1378	0.1498	
10.80	4.7692	0.680	-0.1720		17.40	7.0058	0.620	-0.1530	0.1485	
10.80	4.9095	0.700		0.1552	17.40	8.1358	0.720	-0.1473	0.1295	
10.80	5.0498	0.720	-0.1667		17.40	9.7177	0.860	-0.1233	0.0841	
10.80	6.0317	0.860	-0.1802		17.40	11.2997	1.000	0.3629		
10.80	6.4876	0.925	-0.1714	0.1087						
10.80	6.8032	0.970	-0.1627		19.80	6.9435	0.540	-0.1303	0.1322	
10.80	6.9084	0.985	-0.0517	0.1654	19.80	7.9721	0.620	-0.1468	0.1320	
10.80	7.0136	1.000	0.3249		19.80	9.2580	0.720	-0.1517	0.1075	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1081	0.1639						
13.20	3.9432	0.460	-0.1281		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1531	0.1785	0.54	3.7873	10.800	-0.1586		
13.20	4.9719	0.580	-0.1623		0.54	4.6290	13.200	-0.1531	0.1785	
13.20	5.3148	0.620	-0.1683	0.1814	0.54	5.2602	15.000	-0.1425		
13.20	5.6576	0.660	-0.1597		0.54	6.1018	17.400	-0.1378	0.1498	
13.20	5.8291	0.680	-0.1630		0.54	6.9435	19.800	-0.1303	0.1322	
13.20	6.0005	0.700	-0.1572	0.1656						
13.20	6.1720	0.720	-0.1473		0.62	4.3484	10.800	-0.1762		
13.20	6.3434	0.740	-0.1745		0.62	5.3148	13.200	-0.1683	0.1814	
13.20	6.6863	0.780	-0.1816	0.1447	0.62	6.0395	15.000	-0.1622		
13.20	7.0292	0.820	-0.1745		0.62	7.0058	17.400	-0.1530	0.1485	
13.20	7.3721	0.860	-0.1603	0.1141	0.62	7.9721	19.800	-0.1468	0.1075	
13.20	7.7150	0.900	-0.1566	0.1180						
13.20	7.9293	0.925	-0.1468	0.1204	0.72	5.0498	10.800	-0.1667		
13.20	8.1436	0.950	-0.1507	0.1200	0.72	6.1720	13.200	-0.1473		
13.20	8.3150	0.970	-0.1322	0.1380	0.72	7.0136	15.000	-0.1536		
13.20	8.4436	0.985	0.0143	0.1782	0.72	8.1358	17.400	-0.1473	0.1295	
13.20	8.5293	0.995	0.0820	0.3747	0.72	9.2580	19.800	-0.1517	0.1075	
13.20	8.5722	1.000	0.3856	0.4079						
					0.86	6.0317	10.800	-0.1802		
15.00	5.2602	0.540	-0.1425		0.86	7.3721	13.200	-0.1603	0.1141	
15.00	6.0395	0.620	-0.1622		0.86	8.3774	15.000	-0.1461		
15.00	7.0136	0.720	-0.1536		0.86	9.7177	17.400	-0.1233	0.0841	
15.00	8.3774	0.860	-0.1461							
15.00	9.7411	1.000	0.3291		1.00	7.0136	10.800	0.3249		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3856	0.4079	
					1.00	9.7411	15.000	0.3291		
BASE PRESSURES					1.00	10.5204	16.200	0.3450		
					1.00	11.2997	17.400	0.3629		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.3784									
2	-0.3311									
3	-0.3057									
4	-0.2493									

TABLE AII.- Continued

(c) Continued

RUN 7	POINT 143	MACH 1.62	ALPHA 9.020	BETA 0.0	Q(P5F) 454.9	H0(P5F) 1084.3	P(P5F) 247.6	RE/FT(X10-6) 1.999		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1685	16.20	9.7411	1.000	0.3196		
10.80	3.7873	0.540	-0.1769							
10.80	4.3484	0.620	-0.2003		17.40	6.1018	0.540	-0.1567	0.1762	
10.80	4.7692	0.680	-0.1950		17.40	7.0058	0.620	-0.1802	0.1746	
10.80	4.9095	0.700		0.1768	17.40	8.1358	0.720	-0.1901	0.1563	
10.80	5.0498	0.720	-0.2086		17.40	9.7177	0.860	-0.1603	0.1143	
10.80	6.0317	0.860	-0.2127		17.40	11.2997	1.000	0.3456		
10.80	6.4876	0.925	-0.2088	0.1496						
10.80	6.8032	0.970	-0.1814		19.80	6.9435	0.540	-0.1496	0.1574	
10.80	6.9084	0.985	-0.0854	0.2304	19.80	7.9721	0.620	-0.1797	0.1565	
10.80	7.0136	1.000	0.2897		19.80	9.2580	0.720	-0.1926	0.1360	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1251	0.1857						
13.20	3.9432	0.460	-0.1427		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1704	0.2040	0.54	3.7873	10.800	-0.1769		
13.20	4.9719	0.580	-0.1849		0.54	4.6290	13.200	-0.1704	0.2040	
13.20	5.3148	0.620	-0.1935	0.2053	0.54	5.2602	15.000	-0.1647		
13.20	5.6576	0.660	-0.1869		0.54	6.1018	17.400	-0.1567	0.1762	
13.20	5.8291	0.680	-0.1937		0.54	6.9435	19.800	-0.1496	0.1574	
13.20	6.0005	0.700	-0.2028	0.1907						
13.20	6.1720	0.720	-0.2133		0.62	4.3484	10.800	-0.2003		
13.20	6.3434	0.740	-0.2126		0.62	5.3148	13.200	-0.1935	0.2053	
13.20	6.6863	0.780	-0.2129	0.1753	0.62	6.0395	15.000	-0.1876		
13.20	7.0292	0.820	-0.2035		0.62	7.0058	17.400	-0.1802	0.1746	
13.20	7.3721	0.860	-0.1949	0.1504	0.62	7.9721	19.800	-0.1797	0.1360	
13.20	7.7150	0.900	-0.1939	0.1572						
13.20	7.9293	0.925	-0.1863	0.1615	0.72	5.0498	10.800	-0.2086		
13.20	8.1436	0.950	-0.1786	0.1830	0.72	6.1720	13.200	-0.2133		
13.20	8.3150	0.970	-0.1550	0.1977	0.72	7.0136	15.000	-0.2104		
13.20	8.4436	0.985	-0.0436	0.2487	0.72	8.1358	17.400	-0.1901	0.1563	
13.20	8.5293	0.995	0.0312	0.4182	0.72	9.2580	19.800	-0.1926	0.1360	
13.20	8.5722	1.000	0.3600	0.4001						
					0.86	6.0317	10.800	-0.2127		
15.00	5.2602	0.540	-0.1647		0.86	7.3721	13.200	-0.1949	0.1504	
15.00	6.0395	0.620	-0.1876		0.86	8.3774	15.000	-0.1795		
15.00	7.0136	0.720	-0.2104		0.86	9.7177	17.400	-0.1603	0.1143	
15.00	8.3774	0.860	-0.1795							
15.00	9.7411	1.000	0.2986		1.00	7.0136	10.800	0.2897		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3600	0.4001	
					1.00	9.7411	15.000	0.2986		
BASE PRESSURES					1.00	10.5204	16.200	0.3196		
					1.00	11.2997	17.400	0.3456		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.3993									
2	-0.3046									
3	-0.3116									
4	-0.2519									

TABLE AII.- Continued

(c) Continued

RUN 7	POINT 144	MACH 1.62	ALPHA 10.010	BETA 0.0	Q(PSF) 455.8	H0(PSF) 1086.3	P(PSF) 248.1	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1904	16.20	9.7411	1.000	0.2925		
10.80	3.7873	0.540	-0.1964							
10.80	4.3484	0.620	-0.2266		17.40	6.1018	0.540	-0.1744	0.1986	
10.80	4.7692	0.680	-0.2264		17.40	7.0058	0.620	-0.2160	0.1956	
10.80	4.9095	0.700		0.1994	17.40	8.1358	0.720	-0.2209	0.1807	
10.80	5.0498	0.720	-0.2551		17.40	9.7177	0.860	-0.1934	0.1458	
10.80	6.0317	0.860	-0.2460		17.40	11.2997	1.000	0.3205		
10.80	6.4876	0.925	-0.2376	0.1850						
10.80	6.8032	0.970	-0.2061		19.80	6.9435	0.540	-0.1698	0.1805	
10.80	6.9084	0.985	-0.1359	0.2842	19.80	7.9721	0.620	-0.2167	0.1801	
10.80	7.0136	1.000	0.2539		19.80	9.2580	0.720	-0.2219	0.1582	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1396	0.2099						
13.20	3.9432	0.460	-0.1691		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1900	0.2262	0.54	3.7873	10.800	-0.1964		
13.20	4.9719	0.580	-0.2076		0.54	4.6290	13.200	-0.1900	0.2262	
13.20	5.3148	0.620	-0.2139	0.2278	0.54	5.2602	15.000	-0.1859		
13.20	5.6576	0.660	-0.2257		0.54	6.1018	17.400	-0.1744	0.1986	
13.20	5.8291	0.680	-0.2342		0.54	6.9435	19.800	-0.1698	0.1805	
13.20	6.0005	0.700	-0.2481	0.2158						
13.20	6.1720	0.720	-0.2511		0.62	4.3484	10.800	-0.2266		
13.20	6.3434	0.740	-0.2469		0.62	5.3148	13.200	-0.2139	0.2278	
13.20	6.6863	0.780	-0.2401	0.2013	0.62	6.0395	15.000	-0.2139		
13.20	7.0292	0.820	-0.2340		0.62	7.0058	17.400	-0.2160	0.1956	
13.20	7.3721	0.860	-0.2247	0.1833	0.62	7.9721	19.800	-0.2167	0.1582	
13.20	7.7150	0.900	-0.2259	0.1913						
13.20	7.9293	0.925	-0.2182	0.2041	0.72	5.0498	10.800	-0.2551		
13.20	8.1436	0.950	-0.2002	0.2334	0.72	6.1720	13.200	-0.2511		
13.20	8.3150	0.970	-0.1849	0.2465	0.72	7.0136	15.000	-0.2433		
13.20	8.4436	0.985	-0.1007	0.3051	0.72	8.1358	17.400	-0.2209	0.1807	
13.20	8.5293	0.995	-0.0056	0.4511	0.72	9.2580	19.800	-0.2219	0.1582	
13.20	8.5722	1.000	0.3411	0.3934						
					0.86	6.0317	10.800	-0.2460		
15.00	5.2602	0.540	-0.1859		0.86	7.3721	13.200	-0.2247	0.1833	
15.00	6.0395	0.620	-0.2139		0.86	8.3774	15.000	-0.2180		
15.00	7.0136	0.720	-0.2433		0.86	9.7177	17.400	-0.1934	0.1458	
15.00	8.3774	0.860	-0.2180							
15.00	9.7411	1.000	0.2695		1.00	7.0136	10.800	0.2539		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3411	0.3934	
					1.00	9.7411	15.000	0.2695		
BASE PRESSURES					1.00	10.5204	16.200	0.2925		
					1.00	11.2997	17.400	0.3205		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4123									
2	-0.3228									
3	-0.3153									
4	-0.2544									

TABLE AII.- Continued

(c) Continued

RUN 7	POINT 145	MACH 1.62	ALPHA 11.030	BETA 0.0	Q(PSF) 455.6	H0(PSF) 1085.9	P(PSF) 248.0	RE/FT(X10-6) 2.001		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.2166	16.20	9.7411	1.000	0.2660		
10.80	3.7873	0.540	-0.2188							
10.80	4.3484	0.620	-0.2399		17.40	6.1018	0.540	-0.1948	0.2253	
10.80	4.7692	0.680	-0.2797		17.40	7.0058	0.620	-0.2660	0.2231	
10.80	4.9095	0.700		0.2259	17.40	8.1358	0.720	-0.2489	0.2086	
10.80	5.0498	0.720	-0.2962		17.40	9.7177	0.860	-0.2223	0.1771	
10.80	6.0317	0.860	-0.2737		17.40	11.2997	1.000	0.3001		
10.80	6.4876	0.925	-0.2648	0.2228						
10.80	6.8032	0.970	-0.2428		19.80	6.9435	0.540	-0.1869	0.2063	
10.80	6.9084	0.985	-0.1737	0.3352	19.80	7.9721	0.620	-0.2782	0.2034	
10.80	7.0136	1.000	0.2195		19.80	9.2580	0.720	-0.2521	0.1858	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1564	0.2360						
13.20	3.9432	0.460	-0.1792		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2113	0.2487	0.54	3.7873	10.800	-0.2188		
13.20	4.9719	0.580	-0.2323		0.54	4.6290	13.200	-0.2113	0.2487	
13.20	5.3148	0.620	-0.2328	0.2503	0.54	5.2602	15.000	-0.2039		
13.20	5.6576	0.660	-0.2756		0.54	6.1018	17.400	-0.1948	0.2253	
13.20	5.8291	0.680	-0.2856		0.54	6.9435	19.800	-0.1869	0.2063	
13.20	6.0005	0.700	-0.2776	0.2369						
13.20	6.1720	0.720	-0.2778		0.62	4.3484	10.800	-0.2399		
13.20	6.3434	0.740	-0.2717		0.62	5.3148	13.200	-0.2328	0.2503	
13.20	6.6863	0.780	-0.2696	0.2318	0.62	6.0395	15.000	-0.2561		
13.20	7.0292	0.820	-0.2622		0.62	7.0058	17.400	-0.2660	0.2231	
13.20	7.3721	0.860	-0.2596	0.2165	0.62	7.9721	19.800	-0.2782	0.1858	
13.20	7.7150	0.900	-0.2527	0.2314						
13.20	7.9293	0.925	-0.2469	0.2410	0.72	5.0498	10.800	-0.2962		
13.20	8.1436	0.950	-0.2355	0.2807	0.72	6.1720	13.200	-0.2778		
13.20	8.3150	0.970	-0.2274	0.2947	0.72	7.0136	15.000	-0.2667		
13.20	8.4436	0.985	-0.1539	0.3574	0.72	8.1358	17.400	-0.2489	0.2086	
13.20	8.5293	0.995	-0.0534	0.4820	0.72	9.2580	19.800	-0.2521	0.1858	
13.20	8.5722	1.000	0.3150	0.3807						
					0.86	6.0317	10.800	-0.2737		
15.00	5.2602	0.540	-0.2039		0.86	7.3721	13.200	-0.2596	0.2165	
15.00	6.0395	0.620	-0.2561		0.86	8.3774	15.000	-0.2418		
15.00	7.0136	0.720	-0.2667		0.86	9.7177	17.400	-0.2223	0.1771	
15.00	8.3774	0.860	-0.2418							
15.00	9.7411	1.000	0.2371		1.00	7.0136	10.800	0.2195		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3150	0.3807	
					1.00	9.7411	15.000	0.2371		
BASE PRESSURES					1.00	10.5204	16.200	0.2660		
PORT	CP				1.00	11.2997	17.400	0.3001		
1	-0.4094				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3222									
3	-0.3304									
4	-0.2523									

APPENDIX A

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TABLE AIII.- FLAT WING-BODY CONFIGURATION WITH NOSE 1

RUN	POINT	MACH	ALPHA	BETA	Q(PSF)	H0(PSF)	P(PSF)	RE/FT(X10-6)		
14	333	1.62	1.990	0.0	455.1	1084.7	247.7	1.999		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0245	16.20	9.7411	1.000	0.3674		
10.80	3.7873	0.540	-0.0424							
10.80	4.3484	0.620	-0.0388		17.40	6.1018	0.540	-0.0318	0.0578	
10.80	4.7692	0.680	-0.0450		17.40	7.0058	0.620	-0.0164	0.0639	
10.80	4.9095	0.700		0.0429	17.40	8.1358	0.720	-0.0272	0.0583	
10.80	5.0498	0.720	-0.0560		17.40	9.7177	0.860	-0.1294	0.0432	
10.80	6.0317	0.860	-0.1436		17.40	11.2997	1.000	0.3378		
10.80	6.4876	0.925	-0.1738	0.0404						
10.80	6.8032	0.970	-0.1300		19.80	6.9435	0.540	-0.0670	0.0518	
10.80	6.9084	0.985	-0.1236	0.1325	19.80	7.9721	0.620	-0.0323	0.0623	
10.80	7.0136	1.000	0.2987		19.80	9.2580	0.720	-0.0476	0.0528	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.0214	0.0525						
13.20	3.9432	0.460	-0.0214		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0195	0.0606	0.54	3.7873	10.800	-0.0424		
13.20	4.9719	0.580	-0.0217		0.54	4.6290	13.200	-0.0195	0.0606	
13.20	5.3148	0.620	-0.0239	0.0621	0.54	5.2602	15.000	-0.0082		
13.20	5.6576	0.660	-0.0312		0.54	6.1018	17.400	-0.0318	0.0578	
13.20	5.8291	0.680	-0.0366		0.54	6.9435	19.800	-0.0670	0.0518	
13.20	6.0005	0.700	-0.0402	0.0607						
13.20	6.1720	0.720	-0.0450		0.62	4.3484	10.800	-0.0388		
13.20	6.3434	0.740	-0.0515		0.62	5.3148	13.200	-0.0239	0.0621	
13.20	6.6863	0.780	-0.0696	0.0553	0.62	6.0395	15.000	-0.0138		
13.20	7.0292	0.820	-0.1034		0.62	7.0058	17.400	-0.0164	0.0639	
13.20	7.3721	0.860	-0.1464	0.0458	0.62	7.9721	19.800	-0.0323	0.0528	
13.20	7.7150	0.900	-0.1708	0.0515						
13.20	7.9293	0.925	-0.1713	0.0584	0.72	5.0498	10.800	-0.0560		
13.20	8.1436	0.950	-0.1775	0.0773	0.72	6.1720	13.200	-0.0450		
13.20	8.3150	0.970	-0.1244	0.0945	0.72	7.0136	15.000	-0.0329		
13.20	8.4436	0.985	-0.1222	0.1395	0.72	8.1358	17.400	-0.0272	0.0583	
13.20	8.5293	0.995	0.0439	0.2148	0.72	9.2580	19.800	-0.0476	0.0528	
13.20	8.5722	1.000	0.3544	0.3720						
15.00	5.2602	0.540	-0.0082		0.86	6.0317	10.800	-0.1436		
15.00	6.0395	0.620	-0.0138		0.86	7.3721	13.200	-0.1464	0.0458	
15.00	7.0136	0.720	-0.0329		0.86	8.3774	15.000	-0.1376		
15.00	8.3774	0.860	-0.1376		0.86	9.7177	17.400	-0.1294	0.0432	
15.00	9.7411	1.000	0.3458							
X	Y	ETA	CP-UP	CP-LOW	1.00	7.0136	10.800	0.2987		
					1.00	8.5722	13.200	0.3544	0.3720	
					1.00	9.7411	15.000	0.3458		
					1.00	10.5204	16.200	0.3674		
					1.00	11.2997	17.400	0.3378		
BASE PRESSURES					ETA	Y	X	CP-UP	CP-LOW	
PORT	CP									
1	-0.4004									
2	-0.2750									
3	-0.2826									
4	-0.2388									

TABLE AIII.- Continued

RUN 14	POINT 334	MACH 1.62	ALPHA 4.000	BETA 0.0	Q(PSF) 454.3	H0(PSF) 1082.8	P(PSF) 247.3	RE/FT(X10-6) 1.996		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0706	16.20	9.7411	1.000	0.3026		
10.80	3.7873	0.540	-0.0786							
10.80	4.3484	0.620	-0.0792		17.40	6.1018	0.540	-0.0619	0.0893	
10.80	4.7692	0.680	-0.0866		17.40	7.0058	0.620	-0.0620	0.0967	
10.80	4.9095	0.700		0.0982	17.40	8.1358	0.720	-0.0900	0.0965	
10.80	5.0498	0.720	-0.1093		17.40	9.7177	0.860	-0.2520	0.1037	
10.80	6.0317	0.860	-0.2499		17.40	11.2997	1.000	0.2689		
10.80	6.4876	0.925	-0.2544	0.1287						
10.80	6.8032	0.970	-0.2439		19.80	6.9435	0.540	-0.1025	0.0809	
10.80	6.9084	0.985	-0.2391	0.2390	19.80	7.9721	0.620	-0.0648	0.0918	
10.80	7.0136	1.000	0.2414		19.80	9.2580	0.720	-0.0971	0.0883	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0608	0.0834						
13.20	3.9432	0.460	-0.0583		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0614	0.0961	0.54	3.7873	10.800	-0.0786		
13.20	4.9719	0.580	-0.0603		0.54	4.6290	13.200	-0.0614	0.0961	
13.20	5.3148	0.620	-0.0631	0.0999	0.54	5.2602	15.000	-0.0544		
13.20	5.6576	0.660	-0.0759		0.54	6.1018	17.400	-0.0619	0.0893	
13.20	5.8291	0.680	-0.0809		0.54	6.9435	19.800	-0.1025	0.0809	
13.20	6.0005	0.700	-0.0810	0.1054						
13.20	6.1720	0.720	-0.0866		0.62	4.3484	10.800	-0.0792		
13.20	6.3434	0.740	-0.1184		0.62	5.3148	13.200	-0.0631	0.0999	
13.20	6.6863	0.780	-0.1734	0.1106	0.62	6.0395	15.000	-0.0621		
13.20	7.0292	0.820	-0.2444		0.62	7.0058	17.400	-0.0620	0.0967	
13.20	7.3721	0.860	-0.2509	0.1142	0.62	7.9721	19.800	-0.0648	0.0883	
13.20	7.7150	0.900	-0.2450	0.1309						
13.20	7.9293	0.925	-0.2474	0.1494	0.72	5.0498	10.800	-0.1093		
13.20	8.1436	0.950	-0.2633	0.1703	0.72	6.1720	13.200	-0.0866		
13.20	8.3150	0.970	-0.2424	0.2015	0.72	7.0136	15.000	-0.0927		
13.20	8.4436	0.985	-0.2321	0.2536	0.72	8.1358	17.400	-0.0900	0.0965	
13.20	8.5293	0.995	-0.0573	0.3272	0.72	9.2580	19.800	-0.0971	0.0883	
13.20	8.5722	1.000	0.3238	0.3824						
					0.86	6.0317	10.800	-0.2499		
15.00	5.2602	0.540	-0.0544		0.86	7.3721	13.200	-0.2509	0.1142	
15.00	6.0395	0.620	-0.0621		0.86	8.3774	15.000	-0.2473		
15.00	7.0136	0.720	-0.0927		0.86	9.7177	17.400	-0.2520	0.1037	
15.00	8.3774	0.860	-0.2473							
15.00	9.7411	1.000	0.2834		1.00	7.0136	10.800	0.2414		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3238	0.3824	
					1.00	9.7411	15.000	0.2834		
BASE PRESSURES					1.00	10.5204	16.200	0.3026		
					1.00	11.2997	17.400	0.2689		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4272									
2	-0.3256									
3	-0.2833									
4	-0.2372									

TABLE AIII.- Continued

RUN 14	POINT 336	MACH 1.62	ALPHA 6.030	BETA 0.0	Q(PSF) 454.8	H0(PSF) 1084.0	P(PSF) 247.6	RE/FT(X10-6) 1.998		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1127	16.20	9.7411	1.000	0.2645		
10.80	3.7873	0.540	-0.1102							
10.80	4.3484	0.620	-0.1301		17.40	6.1018	0.540	-0.0952	0.1339	
10.80	4.7692	0.680	-0.1327		17.40	7.0058	0.620	-0.0985	0.1405	
10.80	4.9095	0.700		0.1490	17.40	8.1358	0.720	-0.1847	0.1431	
10.80	5.0498	0.720	-0.2521		17.40	9.7177	0.860	-0.3187	0.1621	
10.80	6.0317	0.860	-0.3187		17.40	11.2997	1.000	0.2164		
10.80	6.4876	0.925	-0.3270	0.2030						
10.80	6.8032	0.970	-0.3261		19.80	6.9435	0.540	-0.1272	0.1281	
10.80	6.9084	0.985	-0.3141	0.3214	19.80	7.9721	0.620	-0.1020	0.1403	
10.80	7.0136	1.000	0.1830		19.80	9.2580	0.720	-0.1909	0.1396	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0876	0.1169						
13.20	3.9432	0.460	-0.0859		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1031	0.1315	0.54	3.7873	10.800	-0.1102		
13.20	4.9719	0.580	-0.0914		0.54	4.6290	13.200	-0.1031	0.1315	
13.20	5.3148	0.620	-0.1067	0.1402	0.54	5.2602	15.000	-0.0870		
13.20	5.6576	0.660	-0.1476		0.54	6.1018	17.400	-0.0952	0.1339	
13.20	5.8291	0.680	-0.1659		0.54	6.9435	19.800	-0.1272	0.1281	
13.20	6.0005	0.700	-0.1986	0.1480						
13.20	6.1720	0.720	-0.1961		0.62	4.3484	10.800	-0.1301		
13.20	6.3434	0.740	-0.2428		0.62	5.3148	13.200	-0.1067	0.1402	
13.20	6.6863	0.780	-0.2951	0.1566	0.62	6.0395	15.000	-0.1165		
13.20	7.0292	0.820	-0.3169		0.62	7.0058	17.400	-0.0985	0.1405	
13.20	7.3721	0.860	-0.3239	0.1660	0.62	7.9721	19.800	-0.1020	0.1396	
13.20	7.7150	0.900	-0.3212	0.1874						
13.20	7.9293	0.925	-0.3204	0.2066	0.72	5.0498	10.800	-0.2521		
13.20	8.1436	0.950	-0.3343	0.2284	0.72	6.1720	13.200	-0.1961		
13.20	8.3150	0.970	-0.3262	0.2653	0.72	7.0136	15.000	-0.1791		
13.20	8.4436	0.985	-0.3063	0.3244	0.72	8.1358	17.400	-0.1847	0.1431	
13.20	8.5293	0.995	-0.1396	0.3891	0.72	9.2580	19.800	-0.1909	0.1396	
13.20	8.5722	1.000	0.2870	0.3490						
					0.86	6.0317	10.800	-0.3187		
15.00	5.2602	0.540	-0.0870		0.86	7.3721	13.200	-0.3239	0.1660	
15.00	6.0395	0.620	-0.1165		0.86	8.3774	15.000	-0.3171		
15.00	7.0136	0.720	-0.1791		0.86	9.7177	17.400	-0.3187	0.1621	
15.00	8.3774	0.860	-0.3171							
15.00	9.7411	1.000	0.2264		1.00	7.0136	10.800	0.1830		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2870	0.3490	
					1.00	9.7411	15.000	0.2264		
BASE PRESSURES					1.00	10.5204	16.200	0.2645		
					1.00	11.2997	17.400	0.2164		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4326									
2	-0.3524									
3	-0.2978									
4	-0.2386									

TABLE AIII.- Continued

RUN 14	POINT 339	MACH 1.62	ALPHA 7.030	BETA 0.0	Q(PSF) 456.0	H0(PSF) 1086.8	P(PSF) 248.2	RE/FT(X10-6) 2.003		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1267	16.20	9.7411	1.000	0.2468		
10.80	3.7873	0.540	-0.1303							
10.80	4.3484	0.620	-0.1843		17.40	6.1018	0.540	-0.1153	0.1609	
10.80	4.7692	0.680	-0.1845		17.40	7.0058	0.620	-0.1105	0.1664	
10.80	4.9095	0.700		0.1612	17.40	8.1358	0.720	-0.2765	0.1718	
10.80	5.0498	0.720	-0.2991		17.40	9.7177	0.860	-0.3441	0.1958	
10.80	6.0317	0.860	-0.3384		17.40	11.2997	1.000	0.1876		
10.80	6.4876	0.925	-0.3562	0.2271						
10.80	6.8032	0.970	-0.3630		19.80	6.9435	0.540	-0.1355	0.1555	
10.80	6.9084	0.985	-0.3508	0.3372	19.80	7.9721	0.620	-0.1193	0.1674	
10.80	7.0136	1.000	0.1568		19.80	9.2580	0.720	-0.2541	0.1680	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0999	0.1423						
13.20	3.9432	0.460	-0.0997		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1179	0.1572	0.54	3.7873	10.800	-0.1303		
13.20	4.9719	0.580	-0.1031		0.54	4.6290	13.200	-0.1179	0.1572	
13.20	5.3148	0.620	-0.1183	0.1627	0.54	5.2602	15.000	-0.0926		
13.20	5.6576	0.660	-0.2065		0.54	6.1018	17.400	-0.1153	0.1609	
13.20	5.8291	0.680	-0.2708		0.54	6.9435	19.800	-0.1355	0.1555	
13.20	6.0005	0.700	-0.2572	0.1717						
13.20	6.1720	0.720	-0.2611		0.62	4.3484	10.800	-0.1843		
13.20	6.3434	0.740	-0.2898		0.62	5.3148	13.200	-0.1183	0.1627	
13.20	6.6863	0.780	-0.3160	0.1819	0.62	6.0395	15.000	-0.1804		
13.20	7.0292	0.820	-0.3366		0.62	7.0058	17.400	-0.1105	0.1664	
13.20	7.3721	0.860	-0.3467	0.1930	0.62	7.9721	19.800	-0.1193	0.1680	
13.20	7.7150	0.900	-0.3504	0.2196						
13.20	7.9293	0.925	-0.3542	0.2359	0.72	5.0498	10.800	-0.2991		
13.20	8.1436	0.950	-0.3690	0.2572	0.72	6.1720	13.200	-0.2611		
13.20	8.3150	0.970	-0.3568	0.2954	0.72	7.0136	15.000	-0.2771		
13.20	8.4436	0.985	-0.3439	0.3507	0.72	8.1358	17.400	-0.2765	0.1718	
13.20	8.5293	0.995	-0.1806	0.4055	0.72	9.2580	19.800	-0.2541	0.1680	
13.20	8.5722	1.000	0.2528	0.3185						
					0.86	6.0317	10.800	-0.3384		
15.00	5.2602	0.540	-0.0926		0.86	7.3721	13.200	-0.3467	0.1930	
15.00	6.0395	0.620	-0.1804		0.86	8.3774	15.000	-0.3443		
15.00	7.0136	0.720	-0.2771		0.86	9.7177	17.400	-0.3441	0.1958	
15.00	8.3774	0.860	-0.3443							
15.00	9.7411	1.000	0.2028		1.00	7.0136	10.800	0.1568		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2528	0.3185	
					1.00	9.7411	15.000	0.2028		
BASE PRESSURES					1.00	10.5204	16.200	0.2468		
					1.00	11.2997	17.400	0.1876		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4412									
2	-0.3671									
3	-0.3130									
4	-0.2444									

TABLE AIII.- Continued

RUN 14	POINT 341	MACH 1.62	ALPHA 8.020	BETA 0.0	Q(PSF) 455.7	H0(PSF) 1086.2	P(PSF) 248.1	RE/FT(X10-6) 2.002	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.1449	16.20	9.7411	1.000	0.2242	
10.80	3.7873	0.540	-0.1635						
10.80	4.3484	0.620	-0.2236		17.40	6.1018	0.540	-0.1415	0.1861
10.80	4.7692	0.680	-0.2590		17.40	7.0058	0.620	-0.1369	0.1936
10.80	4.9095	0.700		0.1812	17.40	8.1358	0.720	-0.3207	0.1992
10.80	5.0498	0.720	-0.3282		17.40	9.7177	0.860	-0.3614	0.2254
10.80	6.0317	0.860	-0.3584		17.40	11.2997	1.000	0.1518	
10.80	6.4876	0.925	-0.3812	0.2556					
10.80	6.8032	0.970	-0.3891		19.80	6.9435	0.540	-0.1548	0.1791
10.80	6.9084	0.985	-0.3815	0.3572	19.80	7.9721	0.620	-0.1746	0.1925
10.80	7.0136	1.000	0.1249		19.80	9.2580	0.720	-0.2761	0.1951
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.1059	0.1657					
13.20	3.9432	0.460	-0.1138		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.1405	0.1831	0.54	3.7873	10.800	-0.1635	
13.20	4.9719	0.580	-0.1287		0.54	4.6290	13.200	-0.1405	0.1831
13.20	5.3148	0.620	-0.1630	0.1869	0.54	5.2602	15.000	-0.1075	
13.20	5.6576	0.660	-0.2710		0.54	6.1018	17.400	-0.1415	0.1861
13.20	5.8291	0.680	-0.2932		0.54	6.9435	19.800	-0.1548	0.1791
13.20	6.0005	0.700	-0.2890	0.1968					
13.20	6.1720	0.720	-0.3198		0.62	4.3484	10.800	-0.2236	
13.20	6.3434	0.740	-0.3170		0.62	5.3148	13.200	-0.1630	0.1869
13.20	6.6863	0.780	-0.3434	0.2135	0.62	6.0395	15.000	-0.2249	
13.20	7.0292	0.820	-0.3519		0.62	7.0058	17.400	-0.1369	0.1936
13.20	7.3721	0.860	-0.3637	0.2252	0.62	7.9721	19.800	-0.1746	0.1951
13.20	7.7150	0.900	-0.3757	0.2498					
13.20	7.9293	0.925	-0.3800	0.2673	0.72	5.0498	10.800	-0.3282	
13.20	8.1436	0.950	-0.3928	0.2905	0.72	6.1720	13.200	-0.3198	
13.20	8.3150	0.970	-0.3848	0.3233	0.72	7.0136	15.000	-0.3187	
13.20	8.4436	0.985	-0.3730	0.3811	0.72	8.1358	17.400	-0.3207	0.1992
13.20	8.5293	0.995	-0.2089	0.4234	0.72	9.2580	19.800	-0.2761	0.1951
13.20	8.5722	1.000	0.2306	0.2974					
					0.86	6.0317	10.800	-0.3584	
15.00	5.2602	0.540	-0.1075		0.86	7.3721	13.200	-0.3637	0.2252
15.00	6.0395	0.620	-0.2249		0.86	8.3774	15.000	-0.3602	
15.00	7.0136	0.720	-0.3187		0.86	9.7177	17.400	-0.3614	0.2254
15.00	8.3774	0.860	-0.3602						
15.00	9.7411	1.000	0.1750		1.00	7.0136	10.800	0.1249	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2306	0.2974
					1.00	9.7411	15.000	0.1750	
					1.00	10.5204	16.200	0.2242	
					1.00	11.2997	17.400	0.1518	
					ETA	Y	X	CP-UP	CP-LOW
BASE PRESSURES									
PORT	CP								
1	-0.4435								
2	-0.3838								
3	-0.3198								
4	-0.2517								

TABLE AIII.- Concluded

RUN 14	POINT 345	MACH 1.62	ALPHA 9.030	BETA 0.0	Q(PSF) 456.1	H0(PSF) 1086.9	P(PSF) 248.2	RE/FT(X10-6) 2.003		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1754	16.20	9.7411	1.000	0.1909		
10.80	3.7873	0.540	-0.2179							
10.80	4.3484	0.620	-0.2587		17.40	6.1018	0.540	-0.1875	0.2038	
10.80	4.7692	0.680	-0.2894		17.40	7.0058	0.620	-0.2033	0.2125	
10.80	4.9095	0.700		0.2083	17.40	8.1358	0.720	-0.3333	0.2196	
10.80	5.0498	0.720	-0.3519		17.40	9.7177	0.860	-0.3800	0.2534	
10.80	6.0317	0.860	-0.3772		17.40	11.2997	1.000	0.1085		
10.80	6.4876	0.925	-0.4035	0.2876						
10.80	6.8032	0.970	-0.4156		19.80	6.9435	0.540	-0.1995	0.1899	
10.80	6.9084	0.985	-0.4022	0.3830	19.80	7.9721	0.620	-0.2338	0.2057	
10.80	7.0136	1.000	0.0968		19.80	9.2580	0.720	-0.3157	0.2117	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1158	0.1924						
13.20	3.9432	0.460	-0.1263		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1639	0.2091	0.54	3.7873	10.800	-0.2179		
13.20	4.9719	0.580	-0.1601		0.54	4.6290	13.200	-0.1639	0.2091	
13.20	5.3148	0.620	-0.2093	0.2167	0.54	5.2602	15.000	-0.1357		
13.20	5.6576	0.660	-0.3077		0.54	6.1018	17.400	-0.1875	0.2038	
13.20	5.8291	0.680	-0.3287		0.54	6.9435	19.800	-0.1995	0.1899	
13.20	6.0005	0.700	-0.3195	0.2270						
13.20	6.1720	0.720	-0.3516		0.62	4.3484	10.800	-0.2587		
13.20	6.3434	0.740	-0.3483		0.62	5.3148	13.200	-0.2093	0.2167	
13.20	6.6863	0.780	-0.3667	0.2446	0.62	6.0395	15.000	-0.2660		
13.20	7.0292	0.820	-0.3701		0.62	7.0058	17.400	-0.2033	0.2125	
13.20	7.3721	0.860	-0.3788	0.2598	0.62	7.9721	19.800	-0.2338	0.2117	
13.20	7.7150	0.900	-0.3907	0.2872						
13.20	7.9293	0.925	-0.4018	0.3022	0.72	5.0498	10.800	-0.3519		
13.20	8.1436	0.950	-0.4189	0.3283	0.72	6.1720	13.200	-0.3516		
13.20	8.3150	0.970	-0.4121	0.3632	0.72	7.0136	15.000	-0.3442		
13.20	8.4436	0.985	-0.3956	0.4106	0.72	8.1358	17.400	-0.3333	0.2196	
13.20	8.5293	0.995	-0.2375	0.4451	0.72	9.2580	19.800	-0.3157	0.2117	
13.20	8.5722	1.000	0.2001	0.2707						
					0.86	6.0317	10.800	-0.3772		
15.00	5.2602	0.540	-0.1357		0.86	7.3721	13.200	-0.3788	0.2598	
15.00	6.0395	0.620	-0.2660		0.86	8.3774	15.000	-0.3751		
15.00	7.0136	0.720	-0.3442		0.86	9.7177	17.400	-0.3800	0.2534	
15.00	8.3774	0.860	-0.3751							
15.00	9.7411	1.000	0.1401		1.00	7.0136	10.800	0.0968		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2001	0.2707	
					1.00	9.7411	15.000	0.1401		
BASE PRESSURES					1.00	10.5204	16.200	0.1909		
					1.00	11.2997	17.400	0.1085		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4378									
2	-0.3873									
3	-0.3335									
4	-0.2626									

TABLE AIV.- FLAT WING-BODY CANARD CONFIGURATION WITH NOSE 1

(a) $\delta_c = 0^\circ$

RUN 10	POINT 252	MACH 1.62	ALPHA 2.040	BETA 0.0	Q(PSF) 455.3	H0(PSF) 1085.3	P(PSF) 247.9	RE/FT(X10-6) 2.000		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0339	16.20	9.7411	1.000	0.3562		
10.80	3.7873	0.540	-0.0388							
10.80	4.3484	0.620	-0.0360		17.40	6.1018	0.540	-0.0326	0.0490	
10.80	4.7692	0.680	-0.0387		17.40	7.0058	0.620	-0.0258	0.0548	
10.80	4.9095	0.700		0.0505	17.40	8.1358	0.720	-0.0355	0.0512	
10.80	5.0498	0.720	-0.0510		17.40	9.7177	0.860	-0.1253	0.0435	
10.80	6.0317	0.860	-0.1448		17.40	11.2997	1.000	0.3220		
10.80	6.4876	0.925	-0.1718	0.0471						
10.80	6.8032	0.970	-0.1324		19.80	6.9435	0.540	-0.0702	0.0415	
10.80	6.9084	0.985	-0.1197	0.1426	19.80	7.9721	0.620	-0.0358	0.0507	
10.80	7.0136	1.000	0.2912		19.80	9.2580	0.720	-0.0514	0.0436	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.0310	0.0470						
13.20	3.9432	0.460	-0.0286		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0288	0.0570	0.54	3.7873	10.800	-0.0388		
13.20	4.9719	0.580	-0.0240		0.54	4.6290	13.200	-0.0288	0.0570	
13.20	5.3148	0.620	-0.0275	0.0608	0.54	5.2602	15.000	-0.0182		
13.20	5.6576	0.660	-0.0329		0.54	6.1018	17.400	-0.0326	0.0490	
13.20	5.8291	0.680	-0.0381		0.54	6.9435	19.800	-0.0702	0.0415	
13.20	6.0005	0.700	-0.0417	0.0596						
13.20	6.1720	0.720	-0.0471		0.62	4.3484	10.800	-0.0360		
13.20	6.3434	0.740	-0.0510		0.62	5.3148	13.200	-0.0275	0.0608	
13.20	6.6863	0.780	-0.0704	0.0551	0.62	6.0395	15.000	-0.0217		
13.20	7.0292	0.820	-0.0982		0.62	7.0058	17.400	-0.0258	0.0548	
13.20	7.3721	0.860	-0.1475	0.0490	0.62	7.9721	19.800	-0.0358	0.0436	
13.20	7.7150	0.900	-0.1720	0.0528						
13.20	7.9293	0.925	-0.1708	0.0630	0.72	5.0498	10.800	-0.0510		
13.20	8.1436	0.950	-0.1766	0.0738	0.72	6.1720	13.200	-0.0471		
13.20	8.3150	0.970	-0.1244	0.0917	0.72	7.0136	15.000	-0.0365		
13.20	8.4436	0.985	-0.1151	0.1449	0.72	8.1358	17.400	-0.0355	0.0512	
13.20	8.5293	0.995	0.0387	0.2197	0.72	9.2580	19.800	-0.0514	0.0436	
13.20	8.5722	1.000	0.3619	0.3777						
15.00	5.2602	0.540	-0.0182		0.86	6.0317	10.800	-0.1448		
15.00	6.0395	0.620	-0.0217		0.86	7.3721	13.200	-0.1475	0.0490	
15.00	7.0136	0.720	-0.0365		0.86	8.3774	15.000	-0.1305		
15.00	8.3774	0.860	-0.1305		0.86	9.7177	17.400	-0.1253	0.0435	
15.00	9.7411	1.000	0.3293		1.00	7.0136	10.800	0.2912		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3619	0.3777	
					1.00	9.7411	15.000	0.3293		
					1.00	10.5204	16.200	0.3562		
					1.00	11.2997	17.400	0.3220		
PORT	CP									
1	-0.3921				ETA	Y	X	CP-UP	CP-LOW	
2	-0.2881									
3	-0.2832									
4	-0.2372									

TABLE AIV.-Continued

(a) Continued

RUN 10	POINT 253	MACH 1.62	ALPHA 3.970	BETA 0.0	Q(PSF) 454.6	H0(PSF) 1083.5	P(PSF) 247.5	RE/FT(X10-6) 1.997		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0686	16.20	9.7411	1.000	0.3089		
10.80	3.7873	0.540	-0.0742							
10.80	4.3484	0.620	-0.0749		17.40	6.1018	0.540	-0.0667	0.0889	
10.80	4.7692	0.680	-0.0808		17.40	7.0058	0.620	-0.0641	0.0966	
10.80	4.9095	0.700		0.0951	17.40	8.1358	0.720	-0.0867	0.0973	
10.80	5.0498	0.720	-0.0932		17.40	9.7177	0.860	-0.2516	0.1047	
10.80	6.0317	0.860	-0.2421		17.40	11.2997	1.000	0.2616		
10.80	6.4876	0.925	-0.2564	0.1216						
10.80	6.8032	0.970	-0.2516		19.80	6.9435	0.540	-0.1051	0.0777	
10.80	6.9084	0.985	-0.2409	0.2345	19.80	7.9721	0.620	-0.0725	0.0905	
10.80	7.0136	1.000	0.2290		19.80	9.2580	0.720	-0.0978	0.0872	
	X		Y		ETA		CP-UP		CP-LOW	
13.20	3.4289	0.400	-0.0639	0.0843						
13.20	3.9432	0.460	-0.0629		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0638	0.0976	0.54	3.7873	10.800	-0.0742		
13.20	4.9719	0.580	-0.0619		0.54	4.6290	13.200	-0.0638	0.0976	
13.20	5.3148	0.620	-0.0651	0.1013	0.54	5.2602	15.000	-0.0568		
13.20	5.6576	0.660	-0.0671		0.54	6.1018	17.400	-0.0667	0.0889	
13.20	5.8291	0.680	-0.0787		0.54	6.9435	19.800	-0.1051	0.0777	
13.20	6.0005	0.700	-0.0821	0.1084						
13.20	6.1720	0.720	-0.0826		0.62	4.3484	10.800	-0.0749		
13.20	6.3434	0.740	-0.0882		0.62	5.3148	13.200	-0.0651	0.1013	
13.20	6.6863	0.780	-0.1277	0.1071	0.62	6.0395	15.000	-0.0618		
13.20	7.0292	0.820	-0.2188		0.62	7.0058	17.400	-0.0641	0.0966	
13.20	7.3721	0.860	-0.2527	0.1115	0.62	7.9721	19.800	-0.0725	0.0872	
13.20	7.7150	0.900	-0.2532	0.1281						
13.20	7.9293	0.925	-0.2543	0.1420	0.72	5.0498	10.800	-0.0932		
13.20	8.1436	0.950	-0.2621	0.1653	0.72	6.1720	13.200	-0.0826		
13.20	8.3150	0.970	-0.2460	0.1843	0.72	7.0136	15.000	-0.0841		
13.20	8.4436	0.985	-0.2292	0.2497	0.72	8.1358	17.400	-0.0867	0.0973	
13.20	8.5293	0.995	-0.0588	0.3245	0.72	9.2580	19.800	-0.0978	0.0872	
13.20	8.5722	1.000	0.3224	0.3781						
15.00	5.2602	0.540	-0.0568		0.86	6.0317	10.800	-0.2421		
15.00	6.0395	0.620	-0.0618		0.86	7.3721	13.200	-0.2527	0.1115	
15.00	7.0136	0.720	-0.0841		0.86	8.3774	15.000	-0.2457		
15.00	8.3774	0.860	-0.2457		0.86	9.7177	17.400	-0.2516	0.1047	
15.00	9.7411	1.000	0.2801		1.00	7.0136	10.800	0.2290		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3224	0.3781	
					1.00	9.7411	15.000	0.2801		
BASE PRESSURES					1.00	10.5204	16.200	0.3089		
					1.00	11.2997	17.400	0.2616		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4302									
2	-0.3050									
3	-0.2859									
4	-0.2384									

(a) Continued

RUN	POINT	MACH	ALPHA	BETA	Q(PSF)	H0(PSF)	P(PSF)	RE/FT(X10-6)	
10	254	1.62	6.030	0.0	455.6	1085.8	248.0	2.001	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.0989	16.20	9.7411	1.000	0.2624	
10.80	3.7873	0.540	-0.1079						
10.80	4.3484	0.620	-0.1124		17.40	6.1018	0.540	-0.0955	0.1365
10.80	4.7692	0.680	-0.1265		17.40	7.0058	0.620	-0.1122	0.1424
10.80	4.9095	0.700		0.1341	17.40	8.1358	0.720	-0.1568	0.1487
10.80	5.0498	0.720	-0.1254		17.40	9.7177	0.860	-0.3183	0.1659
10.80	6.0317	0.860	-0.3061		17.40	11.2997	1.000	0.2120	
10.80	6.4876	0.925	-0.3347	0.1880					
10.80	6.8032	0.970	-0.3374		19.80	6.9435	0.540	-0.1401	0.1270
10.80	6.9084	0.985	-0.3285	0.3116	19.80	7.9721	0.620	-0.1086	0.1400
10.80	7.0136	1.000	0.1678		19.80	9.2580	0.720	-0.1764	0.1423
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.0939	0.1258					
13.20	3.9432	0.460	-0.0982		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.1005	0.1359	0.54	3.7873	10.800	-0.1079	
13.20	4.9719	0.580	-0.1028		0.54	4.6290	13.200	-0.1005	0.1359
13.20	5.3148	0.620	-0.1008	0.1416	0.54	5.2602	15.000	-0.0919	
13.20	5.6576	0.660	-0.1061		0.54	6.1018	17.400	-0.0955	0.1365
13.20	5.8291	0.680	-0.1061		0.54	6.9435	19.800	-0.1401	0.1270
13.20	6.0005	0.700	-0.1399	0.1484					
13.20	6.1720	0.720	-0.1795		0.62	4.3484	10.800	-0.1124	
13.20	6.3434	0.740	-0.1712		0.62	5.3148	13.200	-0.1008	0.1416
13.20	6.6863	0.780	-0.2468	0.1544	0.62	6.0395	15.000	-0.0939	
13.20	7.0292	0.820	-0.3004		0.62	7.0058	17.400	-0.1122	0.1424
13.20	7.3721	0.860	-0.3181	0.1654	0.62	7.9721	19.800	-0.1086	0.1423
13.20	7.7150	0.900	-0.3283	0.1880					
13.20	7.9293	0.925	-0.3305	0.2080	0.72	5.0498	10.800	-0.1254	
13.20	8.1436	0.950	-0.3412	0.2357	0.72	6.1720	13.200	-0.1795	
13.20	8.3150	0.970	-0.3330	0.2582	0.72	7.0136	15.000	-0.1467	
13.20	8.4436	0.985	-0.3130	0.3234	0.72	8.1358	17.400	-0.1568	0.1487
13.20	8.5293	0.995	-0.1507	0.3866	0.72	9.2580	19.800	-0.1764	0.1423
13.20	8.5722	1.000	0.2784	0.3382					
					0.86	6.0317	10.800	-0.3061	
15.00	5.2602	0.540	-0.0919		0.86	7.3721	13.200	-0.3181	0.1654
15.00	6.0395	0.620	-0.0939		0.86	8.3774	15.000	-0.3172	
15.00	7.0136	0.720	-0.1467		0.86	9.7177	17.400	-0.3183	0.1659
15.00	8.3774	0.860	-0.3172						
15.00	9.7411	1.000	0.2257		1.00	7.0136	10.800	0.1678	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2784	0.3382
					1.00	9.7411	15.000	0.2257	
					1.00	10.5204	16.200	0.2624	
					1.00	11.2997	17.400	0.2120	
					ETA	Y	X	CP-UP	CP-LOW
			</						

TABLE AIV.--Continued

(a) Continued

RUN 10	POINT 255	MACH 1.62	ALPHA 6.980	BETA 0.0	Q(PSF) 454.5	H0(PSF) 1083.3	P(PSF) 247.4	RE/FT(X10-6) 1.997		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1145	16.20	9.7411	1.000	0.2375		
10.80	3.7873	0.540	-0.1291							
10.80	4.3484	0.620	-0.1323		17.40	6.1018	0.540	-0.1088	0.1537	
10.80	4.7692	0.680	-0.1506		17.40	7.0058	0.620	-0.1209	0.1625	
10.80	4.9095	0.700		0.1482	17.40	8.1358	0.720	-0.2246	0.1702	
10.80	5.0498	0.720	-0.1551		17.40	9.7177	0.860	-0.3439	0.1941	
10.80	6.0317	0.860	-0.3357		17.40	11.2997	1.000	0.1773		
10.80	6.4876	0.925	-0.3660	0.2159						
10.80	6.8032	0.970	-0.3707		19.80	6.9435	0.540	-0.1533	0.1447	
10.80	6.9084	0.985	-0.3604	0.3296	19.80	7.9721	0.620	-0.1330	0.1587	
10.80	7.0136	1.000	0.1307		19.80	9.2580	0.720	-0.2208	0.1619	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1136	0.1440						
13.20	3.9432	0.460	-0.1188		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1200	0.1563	0.54	3.7873	10.800	-0.1291		
13.20	4.9719	0.580	-0.1216		0.54	4.6290	13.200	-0.1200	0.1563	
13.20	5.3148	0.620	-0.1235	0.1595	0.54	5.2602	15.000	-0.1158		
13.20	5.6576	0.660	-0.1256		0.54	6.1018	17.400	-0.1088	0.1537	
13.20	5.8291	0.680	-0.1189		0.54	6.9435	19.800	-0.1533	0.1447	
13.20	6.0005	0.700	-0.1712	0.1693						
13.20	6.1720	0.720	-0.2623		0.62	4.3484	10.800	-0.1323		
13.20	6.3434	0.740	-0.2734		0.62	5.3148	13.200	-0.1235	0.1595	
13.20	6.6863	0.780	-0.2656	0.1791	0.62	6.0395	15.000	-0.1140		
13.20	7.0292	0.820	-0.3279		0.62	7.0058	17.400	-0.1209	0.1625	
13.20	7.3721	0.860	-0.3364	0.1933	0.62	7.9721	19.800	-0.1330	0.1619	
13.20	7.7150	0.900	-0.3514	0.2166						
13.20	7.9293	0.925	-0.3584	0.2338	0.72	5.0498	10.800	-0.1551		
13.20	8.1436	0.950	-0.3712	0.2632	0.72	6.1720	13.200	-0.2623		
13.20	8.3150	0.970	-0.3641	0.2861	0.72	7.0136	15.000	-0.1755		
13.20	8.4436	0.985	-0.3491	0.3476	0.72	8.1358	17.400	-0.2246	0.1702	
13.20	8.5293	0.995	-0.1860	0.4031	0.72	9.2580	19.800	-0.2208	0.1619	
13.20	8.5722	1.000	0.2467	0.3130						
					0.86	6.0317	10.800	-0.3357		
15.00	5.2602	0.540	-0.1158		0.86	7.3721	13.200	-0.3364	0.1933	
15.00	6.0395	0.620	-0.1140		0.86	8.3774	15.000	-0.3334		
15.00	7.0136	0.720	-0.1755		0.86	9.7177	17.400	-0.3439	0.1941	
15.00	8.3774	0.860	-0.3334							
15.00	9.7411	1.000	0.1940		1.00	7.0136	10.800	0.1307		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2467	0.3130	
					1.00	9.7411	15.000	0.1940		
BASE PRESSURES					1.00	10.5204	16.200	0.2375		
					1.00	11.2997	17.400	0.1773		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4344									
2	-0.3795									
3	-0.3020									
4	-0.2449									

TABLE AIV.- Continued

(a) Continued

RUN 10	POINT 256	MACH 1.62	ALPHA 8.050	BETA 0.0	Q(PSF) 454.9	H0(PSF) 1084.2	P(PSF) 247.6	RE/FT(X10-6) 1.998		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1345	16.20	9.7411	1.000	0.2116		
10.80	3.7873	0.540	-0.1496							
10.80	4.3484	0.620	-0.1525		17.40	6.1018	0.540	-0.1279	0.1799	
10.80	4.7692	0.680	-0.1868		17.40	7.0058	0.620	-0.1677	0.1883	
10.80	4.9095	0.700		0.1720	17.40	8.1358	0.720	-0.2841	0.1988	
10.80	5.0498	0.720	-0.2062		17.40	9.7177	0.860	-0.3644	0.2262	
10.80	6.0317	0.860	-0.3586		17.40	11.2997	1.000	0.1357		
10.80	6.4876	0.925	-0.3783	0.2519						
10.80	6.8032	0.970	-0.4003		19.80	6.9435	0.540	-0.1723	0.1684	
10.80	6.9084	0.985	-0.3874	0.3549	19.80	7.9721	0.620	-0.1890	0.1829	
10.80	7.0136	1.000	0.0987		19.80	9.2580	0.720	-0.2572	0.1893	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1304	0.1685						
13.20	3.9432	0.460	-0.1351		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1357	0.1799	0.54	3.7873	10.800	-0.1496		
13.20	4.9719	0.580	-0.1357		0.54	4.6290	13.200	-0.1357	0.1799	
13.20	5.3148	0.620	-0.1361	0.1870	0.54	5.2602	15.000	-0.1274		
13.20	5.6576	0.660	-0.1812		0.54	6.1018	17.400	-0.1279	0.1799	
13.20	5.8291	0.680	-0.1995		0.54	6.9435	19.800	-0.1723	0.1684	
13.20	6.0005	0.700	-0.2805	0.1972						
13.20	6.1720	0.720	-0.2817		0.62	4.3484	10.800	-0.1525		
13.20	6.3434	0.740	-0.2961		0.62	5.3148	13.200	-0.1361	0.1870	
13.20	6.6863	0.780	-0.2822	0.2130	0.62	6.0395	15.000	-0.1574		
13.20	7.0292	0.820	-0.3542		0.62	7.0058	17.400	-0.1677	0.1883	
13.20	7.3721	0.860	-0.3561	0.2300	0.62	7.9721	19.800	-0.1890	0.1893	
13.20	7.7150	0.900	-0.3677	0.2542						
13.20	7.9293	0.925	-0.3810	0.2712	0.72	5.0498	10.800	-0.2062		
13.20	8.1436	0.950	-0.3963	0.2991	0.72	6.1720	13.200	-0.2817		
13.20	8.3150	0.970	-0.3898	0.3284	0.72	7.0136	15.000	-0.2415		
13.20	8.4436	0.985	-0.3774	0.3785	0.72	8.1358	17.400	-0.2841	0.1988	
13.20	8.5293	0.995	-0.2223	0.4238	0.72	9.2580	19.800	-0.2572	0.1893	
13.20	8.5722	1.000	0.2188	0.2843						
					0.86	6.0317	10.800	-0.3586		
15.00	5.2602	0.540	-0.1274		0.86	7.3721	13.200	-0.3561	0.2300	
15.00	6.0395	0.620	-0.1574		0.86	8.3774	15.000	-0.3529		
15.00	7.0136	0.720	-0.2415		0.86	9.7177	17.400	-0.3644	0.2262	
15.00	8.3774	0.860	-0.3529							
15.00	9.7411	1.000	0.1595		1.00	7.0136	10.800	0.0987		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2188	0.2843	
					1.00	9.7411	15.000	0.1595		
BASE PRESSURES					1.00	10.5204	16.200	0.2116		
PORT	CP				1.00	11.2997	17.400	0.1357		
1	-0.4392				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3922									
3	-0.3253									
4	-0.2487									

TABLE AIV.--Continued

(a) Concluded

RUN 10	POINT 257	MACH 1.62	ALPHA 9.050	BETA 0.0	Q(PSF) 454.9	H0(PSF) 1084.3	P(PSF) 247.6	RE/FT(X10-6) 1.999	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.1539	16.20	9.7411	1.000	0.1880	
10.80	3.7873	0.540	-0.1680						
10.80	4.3484	0.620	-0.1576		17.40	6.1018	0.540	-0.1475	0.2013
10.80	4.7692	0.680	-0.2585		17.40	7.0058	0.620	-0.2630	0.2119
10.80	4.9095	0.700		0.1948	17.40	8.1358	0.720	-0.2870	0.2215
10.80	5.0498	0.720	-0.3167		17.40	9.7177	0.860	-0.3777	0.2564
10.80	6.0317	0.860	-0.3758		17.40	11.2997	1.000	0.1024	
10.80	6.4876	0.925	-0.3778	0.2793					
10.80	6.8032	0.970	-0.4005		19.80	6.9435	0.540	-0.2234	0.1912
10.80	6.9084	0.985	-0.4165	0.3776	19.80	7.9721	0.620	-0.2726	0.2039
10.80	7.0136	1.000	0.0739		19.80	9.2580	0.720	-0.2478	0.2135
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.1415	0.1918					
13.20	3.9432	0.460	-0.1476		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.1469	0.2035	0.54	3.7873	10.800	-0.1680	
13.20	4.9719	0.580	-0.1368		0.54	4.6290	13.200	-0.1469	0.2035
13.20	5.3148	0.620	-0.1473	0.2107	0.54	5.2602	15.000	-0.1284	
13.20	5.6576	0.660	-0.2881		0.54	6.1018	17.400	-0.1475	0.2013
13.20	5.8291	0.680	-0.2961		0.54	6.9435	19.800	-0.2234	0.1912
13.20	6.0005	0.700	-0.3076	0.2213					
13.20	6.1720	0.720	-0.3101		0.62	4.3484	10.800	-0.1576	
13.20	6.3434	0.740	-0.3266		0.62	5.3148	13.200	-0.1473	0.2107
13.20	6.6863	0.780	-0.3380	0.2376	0.62	6.0395	15.000	-0.2590	
13.20	7.0292	0.820	-0.3736		0.62	7.0058	17.400	-0.2630	0.2119
13.20	7.3721	0.860	-0.3724	0.2608	0.62	7.9721	19.800	-0.2726	0.2135
13.20	7.7150	0.900	-0.3717	0.2797					
13.20	7.9293	0.925	-0.3737	0.3020	0.72	5.0498	10.800	-0.3167	
13.20	8.1436	0.950	-0.3767	0.3252	0.72	6.1720	13.200	-0.3101	
13.20	8.3150	0.970	-0.3877	0.3588	0.72	7.0136	15.000	-0.3004	
13.20	8.4436	0.985	-0.4044	0.4037	0.72	8.1358	17.400	-0.2870	0.2215
13.20	8.5293	0.995	-0.2522	0.4352	0.72	9.2580	19.800	-0.2478	0.2135
13.20	8.5722	1.000	0.1903	0.2526					
					0.86	6.0317	10.800	-0.3758	
15.00	5.2602	0.540	-0.1284		0.86	7.3721	13.200	-0.3724	0.2608
15.00	6.0395	0.620	-0.2590		0.86	8.3774	15.000	-0.3722	
15.00	7.0136	0.720	-0.3004		0.86	9.7177	17.400	-0.3777	0.2564
15.00	8.3774	0.860	-0.3722						
15.00	9.7411	1.000	0.1358		1.00	7.0136	10.800	0.0739	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.1903	0.2526
					1.00	9.7411	15.000	0.1358	
BASE PRESSURES					1.00	10.5204	16.200	0.1880	
PORT	CP				1.00	11.2997	17.400	0.1024	
1	-0.4292				ETA	Y	X	CP-UP	CP-LOW
2	-0.3881								
3	-0.3303								
4	-0.2602								

(b) $\delta_c = -5^\circ$

RUN 12	POINT 275	MACH 1.62	ALPHA 2.020	BETA 0.0	Q(PSF) 456.1	H0(PSF) 1087.1	P(PSF) 248.3	RE/FT(X10-6) 2.004		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0484	16.20	9.7411	1.000	0.3539		
10.80	3.7873	0.540	-0.0405							
10.80	4.3484	0.620	-0.0406		17.40	6.1018	0.540	-0.0283	0.0416	
10.80	4.7692	0.680	-0.0534		17.40	7.0058	0.620	-0.0127	0.0505	
10.80	4.9095	0.700		0.0630	17.40	8.1358	0.720	-0.0243	0.0465	
10.80	5.0498	0.720	-0.0670		17.40	9.7177	0.860	-0.1551	0.0371	
10.80	6.0317	0.860	-0.1902		17.40	11.2997	1.000	0.3287		
10.80	6.4876	0.925	-0.1610	0.0492						
10.80	6.8032	0.970	-0.1126		19.80	6.9435	0.540	-0.0748	0.0390	
10.80	6.9084	0.985	-0.1011	0.1368	19.80	7.9721	0.620	-0.0342	0.0453	
10.80	7.0136	1.000	0.3166		19.80	9.2580	0.720	-0.0446	0.0380	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0255	0.0463						
13.20	3.9432	0.460	-0.0236		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0209	0.0585	0.54	3.7873	10.800	-0.0405		
13.20	4.9719	0.580	-0.0192		0.54	4.6290	13.200	-0.0209	0.0585	
13.20	5.3148	0.620	-0.0214	0.0608	0.54	5.2602	15.000	-0.0104		
13.20	5.6576	0.660	-0.0276		0.54	6.1018	17.400	-0.0283	0.0416	
13.20	5.8291	0.680	-0.0349		0.54	6.9435	19.800	-0.0748	0.0390	
13.20	6.0005	0.700	-0.0355	0.0610						
13.20	6.1720	0.720	-0.0392		0.62	4.3484	10.800	-0.0406		
13.20	6.3434	0.740	-0.0426		0.62	5.3148	13.200	-0.0214	0.0608	
13.20	6.6863	0.780	-0.0797	0.0577	0.62	6.0395	15.000	-0.0131		
13.20	7.0292	0.820	-0.1726		0.62	7.0058	17.400	-0.0127	0.0505	
13.20	7.3721	0.860	-0.1680	0.0524	0.62	7.9721	19.800	-0.0342	0.0380	
13.20	7.7150	0.900	-0.1524	0.0575						
13.20	7.9293	0.925	-0.1562	0.0671	0.72	5.0498	10.800	-0.0670		
13.20	8.1436	0.950	-0.1631	0.0761	0.72	6.1720	13.200	-0.0392		
13.20	8.3150	0.970	-0.1106	0.0965	0.72	7.0136	15.000	-0.0326		
13.20	8.4436	0.985	-0.1008	0.1453	0.72	8.1358	17.400	-0.0243	0.0465	
13.20	8.5293	0.995	0.0618	0.2256	0.72	9.2580	19.800	-0.0446	0.0380	
13.20	8.5722	1.000	0.3650	0.3882						
					0.86	6.0317	10.800	-0.1902		
15.00	5.2602	0.540	-0.0104		0.86	7.3721	13.200	-0.1680	0.0524	
15.00	6.0395	0.620	-0.0131		0.86	8.3774	15.000	-0.1621		
15.00	7.0136	0.720	-0.0326		0.86	9.7177	17.400	-0.1551	0.0371	
15.00	8.3774	0.860	-0.1621							
15.00	9.7411	1.000	0.3331		1.00	7.0136	10.800	0.3166		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3650	0.3882	
					1.00	9.7411	15.000	0.3331		
BASE PRESSURES					1.00	10.5204	16.200	0.3539		
PORT	CP				1.00	11.2997	17.400	0.3287		
1	-0.3900				ETA	Y	X	CP-UP	CP-LOW	
2	-0.2998									
3	-0.2823									
4	-0.2373									

(b) Continued

APPENDIX A

TABLE AIV.- Continued

(b) Continued

RUN 12	POINT 277	MACH 1.62	ALPHA 6.030	BETA 0.0	Q(PSF) 455.3	H0(PSF) 1085.2	P(PSF) 247.9	RE/FT(X10-6) 2.000		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1080	16.20	9.7411	1.000	0.2663		
10.80	3.7873	0.540	-0.1120							
10.80	4.3484	0.620	-0.1221		17.40	6.1018	0.540	-0.0941	0.1333	
10.80	4.7692	0.680	-0.1262		17.40	7.0058	0.620	-0.1008	0.1400	
10.80	4.9095	0.700		0.1413	17.40	8.1358	0.720	-0.1767	0.1450	
10.80	5.0498	0.720	-0.2488		17.40	9.7177	0.860	-0.3188	0.1632	
10.80	6.0317	0.860	-0.3172		17.40	11.2997	1.000	0.2092		
10.80	6.4876	0.925	-0.3255	0.1919						
10.80	6.8032	0.970	-0.3241		19.80	6.9435	0.540	-0.1305	0.1229	
10.80	6.9084	0.985	-0.3194	0.3134	19.80	7.9721	0.620	-0.1049	0.1371	
10.80	7.0136	1.000	0.1864		19.80	9.2580	0.720	-0.1784	0.1367	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0881	0.1257						
13.20	3.9432	0.460	-0.0857		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0991	0.1402	0.54	3.7873	10.800	-0.1120		
13.20	4.9719	0.580	-0.0878		0.54	4.6290	13.200	-0.0991	0.1402	
13.20	5.3148	0.620	-0.0990	0.1457	0.54	5.2602	15.000	-0.0892		
13.20	5.6576	0.660	-0.1319		0.54	6.1018	17.400	-0.0941	0.1333	
13.20	5.8291	0.680	-0.1623		0.54	6.9435	19.800	-0.1305	0.1229	
13.20	6.0005	0.700	-0.1799	0.1555						
13.20	6.1720	0.720	-0.1778		0.62	4.3484	10.800	-0.1221		
13.20	6.3434	0.740	-0.2260		0.62	5.3148	13.200	-0.0990	0.1457	
13.20	6.6863	0.780	-0.2852	0.1609	0.62	6.0395	15.000	-0.1196		
13.20	7.0292	0.820	-0.3141		0.62	7.0058	17.400	-0.1008	0.1400	
13.20	7.3721	0.860	-0.3177	0.1711	0.62	7.9721	19.800	-0.1049	0.1367	
13.20	7.7150	0.900	-0.3181	0.1927						
13.20	7.9293	0.925	-0.3227	0.2105	0.72	5.0498	10.800	-0.2488		
13.20	8.1436	0.950	-0.3335	0.2382	0.72	6.1720	13.200	-0.1778		
13.20	8.3150	0.970	-0.3252	0.2584	0.72	7.0136	15.000	-0.1704		
13.20	8.4436	0.985	-0.3115	0.3220	0.72	8.1358	17.400	-0.1767	0.1450	
13.20	8.5293	0.995	-0.1420	0.3857	0.72	9.2580	19.800	-0.1784	0.1367	
13.20	8.5722	1.000	0.2814	0.3415						
					0.86	6.0317	10.800	-0.3172		
15.00	5.2602	0.540	-0.0892		0.86	7.3721	13.200	-0.3177	0.1711	
15.00	6.0395	0.620	-0.1196		0.86	8.3774	15.000	-0.3168		
15.00	7.0136	0.720	-0.1704		0.86	9.7177	17.400	-0.3188	0.1632	
15.00	8.3774	0.860	-0.3168							
15.00	9.7411	1.000	0.2290		1.00	7.0136	10.800	0.1864		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2814	0.3415	
					1.00	9.7411	15.000	0.2290		
BASE PRESSURES					1.00	10.5204	16.200	0.2663		
PORT	CP				1.00	11.2997	17.400	0.2092		
1	-0.4291				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3586									
3	-0.3004									
4	-0.2426									

TABLE AIV.- Continued

(b) Continued

RUN 12	POINT 278	MACH 1.62	ALPHA 7.040	BETA 0.0	Q(PSF) 455.8	H0(PSF) 1086.4	P(PSF) 248.1	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1288	16.20	9.7411	1.000	0.2388		
10.80	3.7873	0.540	-0.1287							
10.80	4.3484	0.620	-0.1443		17.40	6.1018	0.540	-0.1088	0.1589	
10.80	4.7692	0.680	-0.1559		17.40	7.0058	0.620	-0.1172	0.1642	
10.80	4.9095	0.700		0.1629	17.40	8.1358	0.720	-0.2555	0.1732	
10.80	5.0498	0.720	-0.2865		17.40	9.7177	0.860	-0.3443	0.1950	
10.80	6.0317	0.860	-0.3358		17.40	11.2997	1.000	0.1780		
10.80	6.4876	0.925	-0.3586	0.2293						
10.80	6.8032	0.970	-0.3622		19.80	6.9435	0.540	-0.1371	0.1498	
10.80	6.9084	0.985	-0.3511	0.3404	19.80	7.9721	0.620	-0.1285	0.1636	
10.80	7.0136	1.000	0.1515		19.80	9.2580	0.720	-0.2356	0.1649	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1019	0.1448						
13.20	3.9432	0.460	-0.1058		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1241	0.1588	0.54	3.7873	10.800	-0.1287		
13.20	4.9719	0.580	-0.1094		0.54	4.6290	13.200	-0.1241	0.1588	
13.20	5.3148	0.620	-0.1090	0.1652	0.54	5.2602	15.000	-0.0986		
13.20	5.6576	0.660	-0.1550		0.54	6.1018	17.400	-0.1088	0.1589	
13.20	5.8291	0.680	-0.2218		0.54	6.9435	19.800	-0.1371	0.1498	
13.20	6.0005	0.700	-0.2641	0.1744						
13.20	6.1720	0.720	-0.2432		0.62	4.3484	10.800	-0.1443		
13.20	6.3434	0.740	-0.2831		0.62	5.3148	13.200	-0.1090	0.1652	
13.20	6.6863	0.780	-0.3014	0.1850	0.62	6.0395	15.000	-0.1514		
13.20	7.0292	0.820	-0.3307		0.62	7.0058	17.400	-0.1172	0.1642	
13.20	7.3721	0.860	-0.3443	0.1967	0.62	7.9721	19.800	-0.1285	0.1649	
13.20	7.7150	0.900	-0.3499	0.2230						
13.20	7.9293	0.925	-0.3569	0.2411	0.72	5.0498	10.800	-0.2865		
13.20	8.1436	0.950	-0.3684	0.2699	0.72	6.1720	13.200	-0.2432		
13.20	8.3150	0.970	-0.3586	0.2946	0.72	7.0136	15.000	-0.2590		
13.20	8.4436	0.985	-0.3470	0.3522	0.72	8.1358	17.400	-0.2555	0.1732	
13.20	8.5293	0.995	-0.1796	0.4090	0.72	9.2580	19.800	-0.2356	0.1649	
13.20	8.5722	1.000	0.2535	0.3224						
					0.86	6.0317	10.800	-0.3358		
15.00	5.2602	0.540	-0.0986		0.86	7.3721	13.200	-0.3443	0.1967	
15.00	6.0395	0.620	-0.1514		0.86	8.3774	15.000	-0.3416		
15.00	7.0136	0.720	-0.2590		0.86	9.7177	17.400	-0.3443	0.1950	
15.00	8.3774	0.860	-0.3416							
15.00	9.7411	1.000	0.2033		1.00	7.0136	10.800	0.1515		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2535	0.3224	
BASE PRESSURES					1.00	9.7411	15.000	0.2033		
					1.00	10.5204	16.200	0.2388		
					1.00	11.2997	17.400	0.1780		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4396									
2	-0.3705									
3	-0.3136									
4	-0.2467									

TABLE AIV.- Continued

(b) Continued

RUN 12	POINT 279	MACH 1.62	ALPHA 8.040	BETA 0.0	Q(PSF) 464.6	H0(PSF) 1107.4	P(PSF) 252.9	RE/FT(X10-6) 2.041		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1324	16.20	9.7411	1.000	0.2035		
10.80	3.7873	0.540	-0.1467							
10.80	4.3484	0.620	-0.2140		17.40	6.1018	0.540	-0.1450	0.1665	
10.80	4.7692	0.680	-0.2362		17.40	7.0058	0.620	-0.1434	0.1747	
10.80	4.9095	0.700		0.1676	17.40	8.1358	0.720	-0.3071	0.1818	
10.80	5.0498	0.720	-0.2987		17.40	9.7177	0.860	-0.3701	0.2081	
10.80	6.0317	0.860	-0.3589		17.40	11.2997	1.000	0.1297		
10.80	6.4876	0.925	-0.3842	0.2415						
10.80	6.8032	0.970	-0.3918		19.80	6.9435	0.540	-0.1653	0.1559	
10.80	6.9084	0.985	-0.3848	0.3434	19.80	7.9721	0.620	-0.1923	0.1709	
10.80	7.0136	1.000	0.1024		19.80	9.2580	0.720	-0.2774	0.1750	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1261	0.1594						
13.20	3.9432	0.460	-0.1275		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1601	0.1701	0.54	3.7873	10.800	-0.1467		
13.20	4.9719	0.580	-0.1723		0.54	4.6290	13.200	-0.1601	0.1701	
13.20	5.3148	0.620	-0.1703	0.1782	0.54	5.2602	15.000	-0.1516		
13.20	5.6576	0.660	-0.2096		0.54	6.1018	17.400	-0.1450	0.1665	
13.20	5.8291	0.680	-0.2691		0.54	6.9435	19.800	-0.1653	0.1559	
13.20	6.0005	0.700	-0.2915	0.1865						
13.20	6.1720	0.720	-0.2986		0.62	4.3484	10.800	-0.2140		
13.20	6.3434	0.740	-0.3189		0.62	5.3148	13.200	-0.1703	0.1782	
13.20	6.6863	0.780	-0.3385	0.1993	0.62	6.0395	15.000	-0.1917		
13.20	7.0292	0.820	-0.3540		0.62	7.0058	17.400	-0.1434	0.1747	
13.20	7.3721	0.860	-0.3613	0.2164	0.62	7.9721	19.800	-0.1923	0.1750	
13.20	7.7150	0.900	-0.3746	0.2415						
13.20	7.9293	0.925	-0.3855	0.2597	0.72	5.0498	10.800	-0.2987		
13.20	8.1436	0.950	-0.3970	0.2838	0.72	6.1720	13.200	-0.2986		
13.20	8.3150	0.970	-0.3890	0.3123	0.72	7.0136	15.000	-0.3111		
13.20	8.4436	0.985	-0.3762	0.3605	0.72	8.1358	17.400	-0.3071	0.1818	
13.20	8.5293	0.995	-0.2208	0.4047	0.72	9.2580	19.800	-0.2774	0.1750	
13.20	8.5722	1.000	0.2111	0.2712						
					0.86	6.0317	10.800	-0.3589		
15.00	5.2602	0.540	-0.1516		0.86	7.3721	13.200	-0.3613	0.2164	
15.00	6.0395	0.620	-0.1917		0.86	8.3774	15.000	-0.3597		
15.00	7.0136	0.720	-0.3111		0.86	9.7177	17.400	-0.3701	0.2081	
15.00	8.3774	0.860	-0.3597							
15.00	9.7411	1.000	0.1573		1.00	7.0136	10.800	0.1024		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2111	0.2712	
					1.00	9.7411	15.000	0.1573		
BASE PRESSURES					1.00	10.5204	16.200	0.2035		
PORT	CP				1.00	11.2997	17.400	0.1297		
1	-0.4483				ETA	Y	X	CP-UP	CP-LOW	
2	-0.3919									
3	-0.3267									
4	-0.2554									

APPENDIX A

RUN	POINT	MACH	ALPHA	BETA	Q(PSF)	H0(PSF)	P(PSF)	RE/FT(X10-6)
12	279	1.62	8.040	0.0	455.7	1036.1	248.1	2.041

X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.1456	16.20	10.5204	1.000	0.2181	
10.80	3.7873	0.540	-0.1389						
10.80	4.3484	0.620	-0.2075		17.40	6.1018	0.540	-0.1372	0.1804
10.80	4.7692	0.680	-0.2302		17.40	7.0058	0.620	-0.1356	0.1888
10.80	4.9095	0.700		0.1815	17.40	8.1358	0.720	-0.3025	0.1960
10.80	5.0498	0.720	-0.2939		17.40	9.7177	0.860	-0.3667	0.2228
10.80	6.0317	0.860	-0.3553		17.40	11.2997	1.000	0.1429	
10.80	6.4876	0.925	-0.3811	0.2569					
10.80	6.8032	0.970	-0.3888		19.80	6.9435	0.540	-0.1579	0.1696
10.80	6.9084	0.985	-0.3817	0.3607	19.80	7.9721	0.620	-0.1854	0.1849
10.80	7.0136	1.000	0.1150		19.80	9.2580	0.720	-0.2722	0.1891
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.1179	0.1732					
13.20	3.9432	0.460	-0.1193		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.1526	0.1841	0.54	3.7873	10.800	-0.1389	
13.20	4.9719	0.580	-0.1650		0.54	4.6290	13.200	-0.1526	0.1841
13.20	5.1433	0.600	-0.1630	0.1923	0.54	5.2602	15.000	-0.1439	
13.20	5.6576	0.660	-0.2031		0.54	6.1018	17.400	-0.1372	0.1804
13.20	5.8291	0.680	-0.2637		0.54	6.9435	19.800	-0.1579	0.1696
13.20	6.0005	0.700	-0.2866	0.2008					
13.20	6.1720	0.720	-0.2938						
13.20	6.3434	0.740	-0.3145		0.62	4.3484	10.800	-0.2075	
13.20	6.6863	0.780	-0.3345	0.2138	0.62	6.0395	15.000	-0.1848	
13.20	7.0292	0.820	-0.3503		0.62	7.0058	17.400	-0.1356	0.1888
13.20	7.3721	0.860	-0.3577	0.2313	0.62	7.9721	19.800	-0.1854	0.1891
13.20	7.7150	0.900	-0.3713	0.2569					
13.20	7.9293	0.925	-0.3824	0.2754	0.72	5.0498	10.800	-0.2939	
13.20	8.1436	0.950	-0.3941	0.3000	0.72	6.1720	13.200	-0.2938	
13.20	8.3150	0.970	-0.3860	0.3290	0.72	7.0136	15.000	-0.3065	
13.20	8.4436	0.985	-0.3729	0.3782	0.72	8.1358	17.400	-0.3025	0.1960
13.20	8.5293	0.995	-0.2145	0.4232	0.72	9.2580	19.800	-0.2722	0.1891
13.20	8.5722	1.000	0.2259	0.2871					
					0.86	6.0317	10.800	-0.3553	
15.00	5.2602	0.540	-0.1439		0.86	7.3721	13.200	-0.3577	0.2313
15.00	6.0395	0.620	-0.1848		0.86	8.3774	15.000	-0.3561	
15.00	7.0136	0.720	-0.3065		0.86	9.7177	17.400	-0.3667	0.2228
15.00	8.3774	0.860	-0.3561						
15.00	9.7411	1.000	0.1710		1.00	7.0136	10.800	0.1150	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2259	0.2871

PORT	CP
1	-0.4464
2	-0.3889
3	-0.3224
4	-0.2497

TABLE AIV.- Continued

(b) Concluded

RUN 12	POINT 285	MACH 1.62	ALPHA 9.020	BETA 0.0	Q(PSF) 455.3	H0(PSF) 1085.2	P(PSF) 247.8	RE/FT(X10-6) 2.000		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1670	16.20	9.7411	1.000	0.1871		
10.80	3.7873	0.540	-0.1512							
10.80	4.3484	0.620	-0.2587		17.40	6.1018	0.540	-0.1937	0.2005	
10.80	4.7692	0.680	-0.2882		17.40	7.0058	0.620	-0.2194	0.2084	
10.80	4.9095	0.700		0.2015	17.40	8.1358	0.720	-0.2846	0.2187	
10.80	5.0498	0.720	-0.3035		17.40	9.7177	0.860	-0.3828	0.2508	
10.80	6.0317	0.860	-0.3742		17.40	11.2997	1.000	0.1051		
10.80	6.4876	0.925	-0.3884	0.2850						
10.80	6.8032	0.970	-0.4154		19.80	6.9435	0.540	-0.2188	0.1925	
10.80	6.9084	0.985	-0.4097	0.3813	19.80	7.9721	0.620	-0.2380	0.2067	
10.80	7.0136	1.000	0.0817		19.80	9.2580	0.720	-0.3026	0.2104	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1334	0.1950						
13.20	3.9432	0.460	-0.1357		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1744	0.2037	0.54	3.7873	10.800	-0.1512		
13.20	4.9719	0.580	-0.2325		0.54	4.6290	13.200	-0.1744	0.2037	
13.20	5.3148	0.620	-0.2316	0.2111	0.54	5.2602	15.000	-0.1902		
13.20	5.6576	0.660	-0.2694		0.54	6.1018	17.400	-0.1937	0.2005	
13.20	5.8291	0.680	-0.2978		0.54	6.9435	19.800	-0.2188	0.1925	
13.20	6.0005	0.700	-0.2955	0.2210						
13.20	6.1720	0.720	-0.2880		0.62	4.3484	10.800	-0.2587		
13.20	6.3434	0.740	-0.3277		0.62	5.3148	13.200	-0.2316	0.2111	
13.20	6.6863	0.780	-0.3372	0.2370	0.62	6.0395	15.000	-0.2532		
13.20	7.0292	0.820	-0.3734		0.62	7.0058	17.400	-0.2194	0.2084	
13.20	7.3721	0.860	-0.3738	0.2577	0.62	7.9721	19.800	-0.2380	0.2104	
13.20	7.7150	0.900	-0.3836	0.2816						
13.20	7.9293	0.925	-0.3932	0.3040	0.72	5.0498	10.800	-0.3035		
13.20	8.1436	0.950	-0.4032	0.3298	0.72	6.1720	13.200	-0.2880		
13.20	8.3150	0.970	-0.4130	0.3605	0.72	7.0136	15.000	-0.3016		
13.20	8.4436	0.985	-0.4005	0.4078	0.72	8.1358	17.400	-0.2846	0.2187	
13.20	8.5293	0.995	-0.2429	0.4410	0.72	9.2580	19.800	-0.3026	0.2104	
13.20	8.5722	1.000	0.2001	0.2593						
					0.86	6.0317	10.800	-0.3742		
15.00	5.2602	0.540	-0.1902		0.86	7.3721	13.200	-0.3738	0.2577	
15.00	6.0395	0.620	-0.2532		0.86	8.3774	15.000	-0.3745		
15.00	7.0136	0.720	-0.3016		0.86	9.7177	17.400	-0.3828	0.2508	
15.00	8.3774	0.860	-0.3745							
15.00	9.7411	1.000	0.1357		1.00	7.0136	10.800	0.0817		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2001	0.2593	
					1.00	9.7411	15.000	0.1357		
					1.00	10.5204	16.200	0.1871		
					1.00	11.2997	17.400	0.1051		
					ETA	Y	X	CP-UP	CP-LOW	
BASE PRESSURES										
PORT	CP									
1	-0.4386									
2	-0.3934									
3	-0.3379									
4	-0.2573									

APPENDIX A

RUN 13	POINT 297	MACH 1.62	ALPHA 2.000	BETA 0.0	Q(PSF) 455.7	H0(PSF) 1086.2	P(PSF) 248.1	RE/FT(X10-6) 2.002		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.0553	16.20	9.7411	1.000	0.3516		
10.80	3.7873	0.540	-0.0277							
10.80	4.3484	0.620	-0.0267		17.40	6.1018	0.540	-0.0226	0.0464	
10.80	4.7692	0.680	-0.0378		17.40	7.0058	0.620	-0.0055	0.0561	
10.80	4.9095	0.700		0.0696	17.40	8.1358	0.720	-0.0147	0.0522	
10.80	5.0498	0.720	-0.0818		17.40	9.7177	0.860	-0.1579	0.0466	
10.80	6.0317	0.860	-0.1884		17.40	11.2997	1.000	0.3208		
10.80	6.4876	0.925	-0.1553	0.0573						
10.80	6.8032	0.970	-0.0984		19.80	6.9435	0.540	-0.0708	0.0437	
10.80	6.9084	0.985	-0.0872	0.1382	19.80	7.9721	0.620	-0.0232	0.0489	
10.80	7.0136	1.000	0.3227		19.80	9.2580	0.720	-0.0288	0.0399	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0168	0.0564						
13.20	3.9432	0.460	-0.0103		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0076	0.0659	0.54	3.7873	10.800	-0.0277		
13.20	4.9719	0.580	-0.0058		0.54	4.6290	13.200	-0.0076	0.0659	
13.20	5.3148	0.620	-0.0046	0.0693	0.54	5.2602	15.000	-0.0010		
13.20	5.6576	0.660	-0.0147		0.54	6.1018	17.400	-0.0226	0.0464	
13.20	5.8291	0.680	-0.0243		0.54	6.9435	19.800	-0.0708	0.0437	
13.20	6.0005	0.700	-0.0274	0.0695						
13.20	6.1720	0.720	-0.0366		0.62	4.3484	10.800	-0.0267		
13.20	6.3434	0.740	-0.0453		0.62	5.3148	13.200	-0.0046	0.0693	
13.20	6.6863	0.780	-0.1467	0.0668	0.62	6.0395	15.000	-0.0017		
13.20	7.0292	0.820	-0.1770		0.62	7.0058	17.400	-0.0055	0.0561	
13.20	7.3721	0.860	-0.1672	0.0593	0.62	7.9721	19.800	-0.0232	0.0399	
13.20	7.7150	0.900	-0.1519	0.0609						
13.20	7.9293	0.925	-0.1554	0.0689	0.72	5.0498	10.800	-0.0818		
13.20	8.1436	0.950	-0.1625	0.0731	0.72	6.1720	13.200	-0.0366		
13.20	8.3150	0.970	-0.1016	0.0950	0.72	7.0136	15.000	-0.0232		
13.20	8.4436	0.985	-0.0918	0.1378	0.72	8.1358	17.400	-0.0147	0.0522	
13.20	8.5293	0.995	0.0613	0.2192	0.72	9.2580	19.800	-0.0288	0.0399	
13.20	8.5722	1.000	0.3688	0.3832						
					0.86	6.0317	10.800	-0.1884		
15.00	5.2602	0.540	-0.0010		0.86	7.3721	13.200	-0.1672	0.0593	
15.00	6.0395	0.620	-0.0017		0.86	8.3774	15.000	-0.1597		
15.00	7.0136	0.720	-0.0232		0.86	9.7177	17.400	-0.1579	0.0466	
15.00	8.3774	0.860	-0.1597							
15.00	9.7411	1.000	0.3382		1.00	7.0136	10.800	0.3227		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3688	0.3832	
					1.00	9.7411	15.000	0.3382		
BASE PRESSURES										

(c) Continued

RUN	POINT	MACH	ALPHA	BETA	Q(PSF)	H0(PSF)	P(PSF)	RE/FT(X10-6)	
13	300	1.62	4.020	0.0	455.3	1085.2	247.9	2.000	
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW
10.80	2.8054	0.400		0.0887	16.20	9.7411	1.000	0.3179	
10.80	3.7873	0.540	-0.0865						
10.80	4.3484	0.620	-0.0974		17.40	6.1018	0.540	-0.0505	0.0872
10.80	4.7692	0.680	-0.1270		17.40	7.0058	0.620	-0.0443	0.0919
10.80	4.9095	0.700		0.1121	17.40	8.1358	0.720	-0.0821	0.0972
10.80	5.0498	0.720	-0.1613		17.40	9.7177	0.860	-0.2362	0.1072
10.80	6.0317	0.860	-0.2500		17.40	11.2997	1.000	0.2719	
10.80	6.4876	0.925	-0.2352	0.1328					
10.80	6.8032	0.970	-0.2230		19.80	6.9435	0.540	-0.0949	0.0828
10.80	6.9084	0.985	-0.2149	0.2476	19.80	7.9721	0.620	-0.0557	0.0907
10.80	7.0136	1.000	0.2658		19.80	9.2580	0.720	-0.0902	0.0844
					X	Y	ETA	CP-UP	CP-LOW
13.20	3.4289	0.400	-0.0445	0.0882					
13.20	3.9432	0.460	-0.0483		ETA	Y	X	CP-UP	CP-LOW
13.20	4.6290	0.540	-0.0453	0.1043	0.54	3.7873	10.800	-0.0865	
13.20	4.9719	0.580	-0.0435		0.54	4.6290	13.200	-0.0453	0.1043
13.20	5.3148	0.620	-0.0470	0.1085	0.54	5.2602	15.000	-0.0353	
13.20	5.6576	0.660	-0.0683		0.54	6.1018	17.400	-0.0505	0.0872
13.20	5.8291	0.680	-0.0826		0.54	6.9435	19.800	-0.0949	0.0828
13.20	6.0005	0.700	-0.0998	0.1135					
13.20	6.1720	0.720	-0.1281		0.62	4.3484	10.800	-0.0974	
13.20	6.3434	0.740	-0.1797		0.62	5.3148	13.200	-0.0470	0.1085
13.20	6.6863	0.780	-0.2454	0.1201	0.62	6.0395	15.000	-0.0457	
13.20	7.0292	0.820	-0.2374		0.62	7.0058	17.400	-0.0443	0.0919
13.20	7.3721	0.860	-0.2365	0.1215	0.62	7.9721	19.800	-0.0557	0.0844
13.20	7.7150	0.900	-0.2326	0.1370					
13.20	7.9293	0.925	-0.2328	0.1500	0.72	5.0498	10.800	-0.1613	
13.20	8.1436	0.950	-0.2402	0.1746	0.72	6.1720	13.200	-0.1281	
13.20	8.3150	0.970	-0.2245	0.1868	0.72	7.0136	15.000	-0.0974	
13.20	8.4436	0.985	-0.2176	0.2500	0.72	8.1358	17.400	-0.0821	0.0972
13.20	8.5293	0.995	-0.0444	0.3166	0.72	9.2580	19.800	-0.0902	0.0844
13.20	8.5722	1.000	0.3315	0.3845					
					0.86	6.0317	10.800	-0.2500	
15.00	5.2602	0.540	-0.0353		0.86	7.3721	13.200	-0.2365	0.1215
15.00	6.0395	0.620	-0.0457		0.86	8.3774	15.000	-0.2324	
15.00	7.0136	0.720	-0.0974		0.86	9.7177	17.400	-0.2362	0.1072
15.00	8.3774	0.860	-0.2324						
15.00	9.7411	1.000	0.2906		1.00	7.0136	10.800	0.2658	
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.3315	0.3845
					1.00	9.7411	15.000	0.2906	
BASE PRESSURES					1.00	10.5204	16.200	0.3179	
PORT	CP				1.00	11.2997	17.400	0.2719	
1	-0.4247				ETA	Y	X	CP-UP	CP-LOW
2	-0.3257								
3	-0.2811								
4	-0.2362								

TABLE AIV.- Continued

(c) Continued

RUN 13	POINT 304	MACH 1.62	ALPHA 6.020	BETA 0.0	Q(PSF) 454.7	H0(PSF) 1083.7	P(PSF) 247.5	RE/FT(X10-6) 1.997		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1251	16.20	9.7411	1.000	0.2678		
10.80	3.7873	0.540	-0.1453							
10.80	4.3484	0.620	-0.1600		17.40	6.1018	0.540	-0.0827	0.1333	
10.80	4.7692	0.680	-0.1812		17.40	7.0058	0.620	-0.0941	0.1383	
10.80	4.9095	0.700		0.1549	17.40	8.1358	0.720	-0.1981	0.1440	
10.80	5.0498	0.720	-0.2421		17.40	9.7177	0.860	-0.3101	0.1647	
10.80	6.0317	0.860	-0.3115		17.40	11.2997	1.000	0.2130		
10.80	6.4876	0.925	-0.3131	0.2084						
10.80	6.8032	0.970	-0.3170		19.80	6.9435	0.540	-0.1220	0.1270	
10.80	6.9084	0.985	-0.3067	0.3167	19.80	7.9721	0.620	-0.1010	0.1370	
10.80	7.0136	1.000	0.2021		19.80	9.2580	0.720	-0.1891	0.1344	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0695	0.1245						
13.20	3.9432	0.460	-0.0914		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.0864	0.1437	0.54	3.7873	10.800	-0.1453		
13.20	4.9719	0.580	-0.0981		0.54	4.6290	13.200	-0.0864	0.1437	
13.20	5.3148	0.620	-0.1019	0.1505	0.54	5.2602	15.000	-0.0753		
13.20	5.6576	0.660	-0.1584		0.54	6.1018	17.400	-0.0827	0.1333	
13.20	5.8291	0.680	-0.1671		0.54	6.9435	19.800	-0.1220	0.1270	
13.20	6.0005	0.700	-0.1860	0.1566						
13.20	6.1720	0.720	-0.2412		0.62	4.3484	10.800	-0.1600		
13.20	6.3434	0.740	-0.2770		0.62	5.3148	13.200	-0.1019	0.1505	
13.20	6.6863	0.780	-0.3049	0.1676	0.62	6.0395	15.000	-0.0935		
13.20	7.0292	0.820	-0.3106		0.62	7.0058	17.400	-0.0941	0.1383	
13.20	7.3721	0.860	-0.3087	0.1767	0.62	7.9721	19.800	-0.1010	0.1344	
13.20	7.7150	0.900	-0.3103	0.1976						
13.20	7.9293	0.925	-0.3131	0.2176	0.72	5.0498	10.800	-0.2421		
13.20	8.1436	0.950	-0.3261	0.2464	0.72	6.1720	13.200	-0.2412		
13.20	8.3150	0.970	-0.3173	0.2666	0.72	7.0136	15.000	-0.2188		
13.20	8.4436	0.985	-0.3051	0.3308	0.72	8.1358	17.400	-0.1981	0.1440	
13.20	8.5293	0.995	-0.1320	0.3953	0.72	9.2580	19.800	-0.1891	0.1344	
13.20	8.5722	1.000	0.2875	0.3563						
					0.86	6.0317	10.800	-0.3115		
15.00	5.2602	0.540	-0.0753		0.86	7.3721	13.200	-0.3087	0.1767	
15.00	6.0395	0.620	-0.0935		0.86	8.3774	15.000	-0.3067		
15.00	7.0136	0.720	-0.2188		0.86	9.7177	17.400	-0.3101	0.1647	
15.00	8.3774	0.860	-0.3067							
15.00	9.7411	1.000	0.2346		1.00	7.0136	10.800	0.2021		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2875	0.3563	
					1.00	9.7411	15.000	0.2346		
BASE PRESSURES					1.00	10.5204	16.200	0.2678		
					1.00	11.2997	17.400	0.2130		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4307									
2	-0.3555									
3	-0.3033									
4	-0.2395									

TABLE AIV.- Continued

(c) Continued

RUN 13	POINT 307	MACH 1.62	ALPHA 7.020	BETA 0.0	Q(PSF) 454.9	H0(PSF) 1084.3	P(PSF) 247.6	RE/FT(X10-6) 1.999		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1394	16.20	9.7411	1.000	0.2476		
10.80	3.7873	0.540	-0.1392							
10.80	4.3484	0.620	-0.2155		17.40	6.1018	0.540	-0.1263	0.1532	
10.80	4.7692	0.680	-0.1929		17.40	7.0058	0.620	-0.1114	0.1613	
10.80	4.9095	0.700		0.1719	17.40	8.1358	0.720	-0.2697	0.1671	
10.80	5.0498	0.720	-0.2886		17.40	9.7177	0.860	-0.3401	0.1933	
10.80	6.0317	0.860	-0.3358		17.40	11.2997	1.000	0.1821		
10.80	6.4876	0.925	-0.3513	0.2341						
10.80	6.8032	0.970	-0.3519		19.80	6.9435	0.540	-0.1368	0.1499	
10.80	6.9084	0.985	-0.3463	0.3417	19.80	7.9721	0.620	-0.1195	0.1619	
10.80	7.0136	1.000	0.1590		19.80	9.2580	0.720	-0.2527	0.1621	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.0872	0.1438						
13.20	3.9432	0.460	-0.0889		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.1302	0.1609	0.54	3.7873	10.800	-0.1392		
13.20	4.9719	0.580	-0.1086		0.54	4.6290	13.200	-0.1302	0.1609	
13.20	5.3148	0.620	-0.1397	0.1681	0.54	5.2602	15.000	-0.0932		
13.20	5.6576	0.660	-0.2145		0.54	6.1018	17.400	-0.1263	0.1532	
13.20	5.8291	0.680	-0.2480		0.54	6.9435	19.800	-0.1368	0.1499	
13.20	6.0005	0.700	-0.2320	0.1796						
13.20	6.1720	0.720	-0.2650		0.62	4.3484	10.800	-0.2155		
13.20	6.3434	0.740	-0.2876		0.62	5.3148	13.200	-0.1397	0.1681	
13.20	6.6863	0.780	-0.3194	0.1911	0.62	6.0395	15.000	-0.1608		
13.20	7.0292	0.820	-0.3342		0.62	7.0058	17.400	-0.1114	0.1613	
13.20	7.3721	0.860	-0.3415	0.2039	0.62	7.9721	19.800	-0.1195	0.1621	
13.20	7.7150	0.900	-0.3404	0.2283						
13.20	7.9293	0.925	-0.3451	0.2461	0.72	5.0498	10.800	-0.2886		
13.20	8.1436	0.950	-0.3607	0.2646	0.72	6.1720	13.200	-0.2650		
13.20	8.3150	0.970	-0.3549	0.3038	0.72	7.0136	15.000	-0.2789		
13.20	8.4436	0.985	-0.3357	0.3590	0.72	8.1358	17.400	-0.2697	0.1671	
13.20	8.5293	0.995	-0.1720	0.4143	0.72	9.2580	19.800	-0.2527	0.1621	
13.20	8.5722	1.000	0.2621	0.3270						
					0.86	6.0317	10.800	-0.3358		
15.00	5.2602	0.540	-0.0932		0.86	7.3721	13.200	-0.3415	0.2039	
15.00	6.0395	0.620	-0.1608		0.86	8.3774	15.000	-0.3369		
15.00	7.0136	0.720	-0.2789		0.86	9.7177	17.400	-0.3401	0.1933	
15.00	8.3774	0.860	-0.3369							
15.00	9.7411	1.000	0.2051		1.00	7.0136	10.800	0.1590		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2621	0.3270	
					1.00	9.7411	15.000	0.2051		
					1.00	10.5204	16.200	0.2476		
					1.00	11.2997	17.400	0.1821		
BASE PRESSURES					ETA	Y	X	CP-UP	CP-LOW	
PORT	CP									
1	-0.4401									
2	-0.3703									
3	-0.3147									
4	-0.2457									

TABLE AIV.- Continued

(c) Continued

RUN 13	POINT 312	MACH 1.62	ALPHA 8.020	BETA 0.0	Q(PSF) 454.4	H0(PSF) 1083.0	P(PSF) 247.3	RE/FT(X10-6) 1.996		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1603	16.20	9.7411	1.000	0.2174		
10.80	3.7873	0.540	-0.1399							
10.80	4.3484	0.620	-0.2834		17.40	6.1018	0.540	-0.1292	0.1769	
10.80	4.7692	0.680	-0.2262		17.40	7.0058	0.620	-0.1355	0.1831	
10.80	4.9095	0.700		0.1931	17.40	8.1358	0.720	-0.3144	0.1905	
10.80	5.0498	0.720	-0.2949		17.40	9.7177	0.860	-0.3575	0.2203	
10.80	6.0317	0.860	-0.3527		17.40	11.2997	1.000	0.1463		
10.80	6.4876	0.925	-0.3798	0.2673						
10.80	6.8032	0.970	-0.3885		19.80	6.9435	0.540	-0.1519	0.1700	
10.80	6.9084	0.985	-0.3788	0.3673	19.80	7.9721	0.620	-0.1802	0.1802	
10.80	7.0136	1.000	0.1249		19.80	9.2580	0.720	-0.2657	0.1834	
	X	Y	ETA	CP-UP	CP-LOW					
13.20	3.4289	0.400	-0.1062	0.1618						
13.20	3.9432	0.460	-0.0996			ETA	Y	X	CP-UP	
13.20	4.6290	0.540	-0.1838	0.1816		0.54	3.7873	10.800	-0.1399	
13.20	4.9719	0.580	-0.1569			0.54	4.6290	13.200	-0.1838	
13.20	5.3148	0.620	-0.1691	0.1897		0.54	5.2602	15.000	-0.1272	
13.20	5.6576	0.660	-0.2482			0.54	6.1018	17.400	-0.1292	
13.20	5.8291	0.680	-0.2869			0.54	6.9435	19.800	-0.1519	
13.20	6.0005	0.700	-0.2923	0.2008						
13.20	6.1720	0.720	-0.3103		0.62	4.3484	10.800	-0.2834		
13.20	6.3434	0.740	-0.3133		0.62	5.3148	13.200	-0.1691	0.1897	
13.20	6.6863	0.780	-0.3372	0.2178	0.62	6.0395	15.000	-0.2067		
13.20	7.0292	0.820	-0.3492		0.62	7.0058	17.400	-0.1355	0.1831	
13.20	7.3721	0.860	-0.3581	0.2328	0.62	7.9721	19.800	-0.1802	0.1834	
13.20	7.7150	0.900	-0.3698	0.2575						
13.20	7.9293	0.925	-0.3740	0.2810	0.72	5.0498	10.800	-0.2949		
13.20	8.1436	0.950	-0.3905	0.3061	0.72	6.1720	13.200	-0.3103		
13.20	8.3150	0.970	-0.3811	0.3402	0.72	7.0136	15.000	-0.3159		
13.20	8.4436	0.985	-0.3684	0.3943	0.72	8.1358	17.400	-0.3144	0.1905	
13.20	8.5293	0.995	-0.2106	0.4363	0.72	9.2580	19.800	-0.2657	0.1834	
13.20	8.5722	1.000	0.2359	0.3096						
					0.86	6.0317	10.800	-0.3527		
15.00	5.2602	0.540	-0.1272		0.86	7.3721	13.200	-0.3581	0.2328	
15.00	6.0395	0.620	-0.2067		0.86	8.3774	15.000	-0.3572		
15.00	7.0136	0.720	-0.3159		0.86	9.7177	17.400	-0.3575	0.2203	
15.00	8.3774	0.860	-0.3572							
15.00	9.7411	1.000	0.1721		1.00	7.0136	10.800	0.1249		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2359	0.3096	
					1.00	9.7411	15.000	0.1721		
BASE PRESSURES					1.00	10.5204	16.200	0.2174		
					1.00	11.2997	17.400	0.1463		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4367									
2	-0.3851									
3	-0.3131									
4	-0.2514									

TABLE AIV.- Concluded

(c) Concluded

RUN 13	POINT 313	MACH 1.62	ALPHA 9.020	BETA 0.0	Q(PSF) 454.1	H0(PSF) 1082.2	P(PSF) 247.2	RE/FT(X10-6) 1.995		
X	Y	ETA	CP-UP	CP-LOW	X	Y	ETA	CP-UP	CP-LOW	
10.80	2.8054	0.400		0.1761	16.20	9.7411	1.000	0.2011		
10.80	3.7873	0.540	-0.1614							
10.80	4.3484	0.620	-0.3081		17.40	6.1018	0.540	-0.1798	0.2022	
10.80	4.7692	0.680	-0.2619		17.40	7.0058	0.620	-0.2191	0.2103	
10.80	4.9095	0.700		0.2151	17.40	8.1358	0.720	-0.3077	0.2189	
10.80	5.0498	0.720	-0.3209		17.40	9.7177	0.860	-0.3760	0.2504	
10.80	6.0317	0.860	-0.3727		17.40	11.2997	1.000	0.1230		
10.80	6.4876	0.925	-0.3984	0.2929						
10.80	6.8032	0.970	-0.4167		19.80	6.9435	0.540	-0.1997	0.1932	
10.80	6.9084	0.985	-0.4076	0.3877	19.80	7.9721	0.620	-0.2246	0.2074	
10.80	7.0136	1.000	0.0986		19.80	9.2580	0.720	-0.2984	0.2116	
					X	Y	ETA	CP-UP	CP-LOW	
13.20	3.4289	0.400	-0.1134	0.1868						
13.20	3.9432	0.460	-0.1074		ETA	Y	X	CP-UP	CP-LOW	
13.20	4.6290	0.540	-0.2384	0.2069	0.54	3.7873	10.800	-0.1614		
13.20	4.9719	0.580	-0.2097		0.54	4.6290	13.200	-0.2384	0.2069	
13.20	5.3148	0.620	-0.2137	0.2155	0.54	5.2602	15.000	-0.1715		
13.20	5.6576	0.660	-0.2738		0.54	6.1018	17.400	-0.1798	0.2022	
13.20	5.8291	0.680	-0.2961		0.54	6.9435	19.800	-0.1997	0.1932	
13.20	6.0005	0.700	-0.2940	0.2274						
13.20	6.1720	0.720	-0.3146		0.62	4.3484	10.800	-0.3081		
13.20	6.3434	0.740	-0.3367		0.62	5.3148	13.200	-0.2137	0.2155	
13.20	6.6863	0.780	-0.3549	0.2458	0.62	6.0395	15.000	-0.2336		
13.20	7.0292	0.820	-0.3682		0.62	7.0058	17.400	-0.2191	0.2103	
13.20	7.3721	0.860	-0.3693	0.2612	0.62	7.9721	19.800	-0.2246	0.2116	
13.20	7.7150	0.900	-0.3833	0.2864						
13.20	7.9293	0.925	-0.3984	0.3063	0.72	5.0498	10.800	-0.3209		
13.20	8.1436	0.950	-0.4130	0.3303	0.72	6.1720	13.200	-0.3146		
13.20	8.3150	0.970	-0.4092	0.3609	0.72	7.0136	15.000	-0.3302		
13.20	8.4436	0.985	-0.3985	0.4104	0.72	8.1358	17.400	-0.3077	0.2189	
13.20	8.5293	0.995	-0.2301	0.4467	0.72	9.2580	19.800	-0.2984	0.2116	
13.20	8.5722	1.000	0.2146	0.2717						
					0.86	6.0317	10.800	-0.3727		
15.00	5.2602	0.540	-0.1715		0.86	7.3721	13.200	-0.3693	0.2612	
15.00	6.0395	0.620	-0.2336		0.86	8.3774	15.000	-0.3721		
15.00	7.0136	0.720	-0.3302		0.86	9.7177	17.400	-0.3760	0.2504	
15.00	8.3774	0.860	-0.3721							
15.00	9.7411	1.000	0.1523		1.00	7.0136	10.800	0.0986		
X	Y	ETA	CP-UP	CP-LOW	1.00	8.5722	13.200	0.2146	0.2717	
					1.00	9.7411	15.000	0.1523		
BASE PRESSURES					1.00	10.5204	16.200	0.2011		
					1.00	11.2997	17.400	0.1230		
PORT	CP				ETA	Y	X	CP-UP	CP-LOW	
1	-0.4313									
2	-0.3795									
3	-0.3338									
4	-0.2615									

APPENDIX B

FORCE AND MOMENT DATA

Force and moment data for the configurations tested are given in this appendix as a function of angle of attack. This compilation also serves as a key to the run schedule that is to be used with the pressure data presented in appendix A.

TABLE BI.- FORCE AND MOMENT RESULTS

[M = 1.62; R = 2.0×10^6 per foot]

RUN	PT	ALPHA	CN	CA	CL	CD	CM	CAC	CAB	CDC	CDB	L/D	PT
NOSE 2, CANARD OFF													
1	15	8.10	0.2552	0.0317	0.2482	0.0673	0.0293	0.0120	0.0067	0.0119	0.0067	3.6854	15
1	16	9.00	0.2971	0.0289	0.2890	0.0751	0.0333	0.0122	0.0068	0.0121	0.0067	3.8496	16
1	17	10.00	0.3434	0.0260	0.3337	0.0853	0.0377	0.0124	0.0069	0.0122	0.0068	3.9124	17
NOSE 2, CANARD OFF													
2	36	8.02	0.2507	0.0320	0.2438	0.0667	0.0288	0.0117	0.0067	0.0116	0.0067	3.6552	36
2	37	8.02	0.2508	0.0320	0.2439	0.0667	0.0288	0.0117	0.0067	0.0116	0.0067	3.6572	37
2	38	9.00	0.2961	0.0291	0.2879	0.0751	0.0332	0.0119	0.0068	0.0118	0.0067	3.8350	38
2	39	10.02	0.3439	0.0261	0.3341	0.0855	0.0378	0.0122	0.0069	0.0120	0.0068	3.9088	39
2	40	11.01	0.3900	0.0232	0.3784	0.0972	0.0421	0.0124	0.0070	0.0122	0.0069	3.8916	40
2	41	11.98	0.4355	0.0204	0.4218	0.1103	0.0462	0.0127	0.0071	0.0124	0.0070	3.8226	41
NOSE 1, CANARD OFF													
3	61	8.03	0.2501	0.0190	0.2450	0.0538	0.0262	0.0124	0.0067	0.0123	0.0067	4.5575	61
3	62	9.01	0.2959	0.0161	0.2898	0.0623	0.0304	0.0126	0.0068	0.0124	0.0067	4.6547	62
3	63	9.99	0.3414	0.0132	0.3339	0.0722	0.0345	0.0128	0.0069	0.0126	0.0068	4.6223	63
3	64	11.02	0.3895	0.0102	0.3803	0.0845	0.0388	0.0130	0.0070	0.0128	0.0069	4.5022	64
NOSE 1, CANARD OFF													
4	83	8.00	0.2485	0.0184	0.2435	0.0528	0.0264	0.0122	0.0067	0.0120	0.0067	4.6110	83
4	84	8.98	0.2940	0.0156	0.2879	0.0613	0.0305	0.0125	0.0068	0.0123	0.0067	4.6988	84
4	85	9.98	0.3397	0.0128	0.3324	0.0714	0.0347	0.0128	0.0069	0.0126	0.0068	4.6529	85
4	86	10.96	0.3856	0.0099	0.3766	0.0830	0.0388	0.0131	0.0070	0.0128	0.0069	4.5379	86
4	87	11.99	0.4338	0.0070	0.4228	0.0970	0.0430	0.0133	0.0071	0.0130	0.0070	4.3605	87
4	88	12.00	0.4342	0.0069	0.4232	0.0970	0.0430	0.0133	0.0071	0.0131	0.0070	4.3614	88
NOSE 1, CANARD ON CANARD INCIDENCE=0.0													
5	111	7.89	0.2564	0.0197	0.2513	0.0547	0.0349	0.0121	0.0067	0.0120	0.0067	4.5932	111
5	112	8.93	0.3072	0.0165	0.3009	0.0640	0.0410	0.0122	0.0068	0.0121	0.0067	4.7018	112
5	113	9.95	0.3560	0.0135	0.3483	0.0748	0.0467	0.0125	0.0069	0.0123	0.0068	4.6587	113
5	114	10.93	0.4038	0.0106	0.3945	0.0870	0.0522	0.0127	0.0070	0.0125	0.0069	4.5352	114
5	115	11.96	0.4543	0.0077	0.4429	0.1017	0.0579	0.0129	0.0071	0.0127	0.0070	4.3569	115
NOSE 1, CANARD ON CANARD INCIDENCE=-5.0													
6	125	7.99	0.2553	0.0192	0.2501	0.0545	0.0299	0.0121	0.0067	0.0120	0.0067	4.5875	125
6	126	6.01	0.1603	0.0257	0.1568	0.0424	0.0184	0.0118	0.0066	0.0117	0.0066	3.6996	126
6	127	4.01	0.0649	0.0321	0.0625	0.0366	0.0065	0.0119	0.0068	0.0118	0.0067	1.7083	127
6	128	2.01	-0.0290	0.0386	-0.0304	0.0376	-0.0055	0.0126	0.0070	0.0126	0.0070	-0.8077	128
6	129	9.03	0.3060	0.0158	0.2997	0.0636	0.0359	0.0123	0.0068	0.0121	0.0067	4.7121	129
6	130	10.02	0.3539	0.0126	0.3463	0.0740	0.0415	0.0125	0.0069	0.0123	0.0068	4.6772	130
6	131	11.02	0.4022	0.0095	0.3930	0.0862	0.0471	0.0127	0.0070	0.0125	0.0069	4.5604	131
6	132	12.01	0.4502	0.0064	0.4390	0.0999	0.0526	0.0129	0.0071	0.0126	0.0070	4.3928	132
NOSE 1, CANARD ON CANARD INCIDENCE=-10.0													
7	142	7.99	0.2491	0.0202	0.2439	0.0546	0.0248	0.0121	0.0067	0.0120	0.0067	4.4635	142
7	143	9.02	0.2992	0.0167	0.2928	0.0634	0.0307	0.0123	0.0068	0.0121	0.0067	4.6171	143
7	144	10.01	0.3467	0.0135	0.3391	0.0735	0.0363	0.0125	0.0069	0.0123	0.0068	4.6113	144
7	145	11.03	0.3962	0.0101	0.3870	0.0857	0.0419	0.0127	0.0070	0.0124	0.0069	4.5157	145
7	146	11.99	0.4430	0.0070	0.4319	0.0989	0.0471	0.0128	0.0071	0.0125	0.0070	4.3679	146
RUN	PT	ALPHA	CN	CA	CL	CD	CM	CAC	CAB	CDC	CDB	L/D	PT

TABLE BI.- Concluded

RUN	PT	ALPHA	CN	CA	CL	CD	CM	CAC	CAB	CDC	CDB	L/D	PT
NOSE 1, CANARD ON CANARD INCIDENCE=0.0													
8	188	8.01	0.2626	0.0193	0.2574	0.0557	0.0356	0.0121	0.0067	0.0120	0.0067	4.6188	188
8	189	9.00	0.3105	0.0163	0.3042	0.0646	0.0413	0.0123	0.0068	0.0121	0.0067	4.7067	189
8	190	9.02	0.3115	0.0162	0.3051	0.0648	0.0414	0.0123	0.0068	0.0121	0.0067	4.7062	190
8	191	10.01	0.3592	0.0132	0.3514	0.0755	0.0470	0.0125	0.0069	0.0123	0.0068	4.6570	191
8	192	10.01	0.3555	0.0126	0.3479	0.0743	0.0465	0.0127	0.0069	0.0125	0.0068	4.6843	192
8	193	11.03	0.4085	0.0102	0.3990	0.0882	0.0527	0.0127	0.0070	0.0125	0.0069	4.5232	193
8	194	12.03	0.4569	0.0074	0.4453	0.1025	0.0581	0.0130	0.0071	0.0127	0.0070	4.3455	194
FLAT WING													
NOSE 1, CANARD ON CANARD INCIDENCE=0.0													
10	249	-1.95	-0.0898	0.0317	-0.0886	0.0347	-0.0123	0.0115	0.0063	0.0115	0.0063	-2.5549	249
10	250	0.03	-0.0014	0.0313	-0.0014	0.0313	-0.0017	0.0109	0.0062	0.0109	0.0062	-0.0442	250
10	252	2.04	0.0919	0.0310	0.0907	0.0342	0.0097	0.0112	0.0063	0.0112	0.0063	2.6532	252
10	253	3.97	0.1794	0.0305	0.1769	0.0428	0.0202	0.0117	0.0064	0.0117	0.0064	4.1293	253
10	254	6.03	0.2719	0.0302	0.2672	0.0586	0.0313	0.0122	0.0066	0.0122	0.0066	4.5617	254
10	255	6.98	0.3149	0.0300	0.3089	0.0681	0.0363	0.0125	0.0068	0.0124	0.0067	4.5379	255
10	256	8.05	0.3622	0.0298	0.3544	0.0802	0.0417	0.0129	0.0070	0.0128	0.0069	4.4192	256
10	257	9.05	0.4074	0.0296	0.3977	0.0933	0.0466	0.0132	0.0071	0.0131	0.0070	4.2643	257
NOSE 1, CANARD ON CANARD INCIDENCE=0.0 MODEL INVERTED													
11	258	-2.03	-0.0929	0.0318	-0.0918	0.0351	-0.0124	0.0113	0.0063	0.0113	0.0063	-2.6167	258
11	259	-0.01	-0.0014	0.0309	-0.0014	0.0309	-0.0014	0.0106	0.0062	0.0106	0.0062	-0.0444	259
11	260	1.99	0.0885	0.0303	0.0873	0.0334	0.0095	0.0101	0.0063	0.0101	0.0063	2.6169	260
11	261	3.96	0.1760	0.0298	0.1735	0.0419	0.0201	0.0106	0.0064	0.0105	0.0064	4.1439	261
11	262	5.96	0.2675	0.0295	0.2630	0.0571	0.0310	0.0111	0.0066	0.0110	0.0066	4.6048	262
NOSE 1, CANARD ON CANARD INCIDENCE=-5.0													
12	275	2.02	0.0879	0.0322	0.0868	0.0353	0.0047	0.0111	0.0063	0.0111	0.0063	2.4559	275
12	276	4.02	0.1785	0.0314	0.1758	0.0438	0.0157	0.0116	0.0064	0.0116	0.0064	4.0111	276
12	277	6.03	0.2689	0.0309	0.2641	0.0590	0.0264	0.0122	0.0066	0.0122	0.0066	4.4765	277
12	278	7.04	0.3144	0.0305	0.3083	0.0689	0.0316	0.0125	0.0068	0.0124	0.0067	4.4764	278
12	279	8.04	0.3514	0.0287	0.3439	0.0776	0.0359	0.0131	0.0070	0.0130	0.0069	4.4295	279
12	280	9.04	0.4034	0.0296	0.3937	0.0926	0.0415	0.0130	0.0071	0.0129	0.0070	4.2531	280
12	285	9.02	0.4028	0.0295	0.3932	0.0923	0.0415	0.0130	0.0071	0.0128	0.0070	4.2598	285
NOSE 1, CANARD ON CANARD INCIDENCE=-10.0													
13	297	2.00	0.0843	0.0350	0.0830	0.0379	0.0004	0.0112	0.0063	0.0112	0.0063	2.1902	297
13	300	4.02	0.1740	0.0337	0.1712	0.0458	0.0108	0.0116	0.0064	0.0115	0.0064	3.7375	300
13	304	6.02	0.2639	0.0326	0.2590	0.0601	0.0214	0.0121	0.0066	0.0121	0.0066	4.3103	304
13	307	7.02	0.3089	0.0319	0.3027	0.0694	0.0266	0.0124	0.0068	0.0123	0.0067	4.3602	307
13	312	8.02	0.3535	0.0313	0.3456	0.0803	0.0316	0.0127	0.0070	0.0125	0.0069	4.3045	312
13	313	9.02	0.3988	0.0306	0.3890	0.0928	0.0367	0.0128	0.0071	0.0127	0.0070	4.1927	313
NOSE 1, CANARD OFF													
14	333	1.99	0.0914	0.0303	0.0903	0.0334	0.0101	0.0113	0.0063	0.0113	0.0063	2.7013	333
14	334	4.00	0.1806	0.0300	0.1781	0.0425	0.0183	0.0117	0.0064	0.0117	0.0064	4.1896	334
14	336	6.03	0.2706	0.0301	0.2660	0.0583	0.0264	0.0122	0.0066	0.0121	0.0066	4.5587	336
14	339	7.03	0.3150	0.0300	0.3090	0.0684	0.0303	0.0125	0.0068	0.0124	0.0067	4.5191	339
14	341	8.02	0.3572	0.0299	0.3495	0.0794	0.0338	0.0127	0.0070	0.0126	0.0069	4.4010	341
14	345	9.03	0.3997	0.0298	0.3901	0.0921	0.0374	0.0128	0.0071	0.0127	0.0070	4.2353	345
RUN	PT	ALPHA	CN	CA	CL	CD	CM	CAC	CAB	CDC	CDB	L/D	PT

APPENDIX C

FORCE AND MOMENT DATA FROM REFERENCE 2

The tables for force and moment data for the wing-alone tests were inadvertently left out of reference 2 and are included herein for completeness.

TABLE CI.- FLAT-WING FORCE AND MOMENT DATA WITH FREE TRANSITION

ALPHA, DEG	CN	CA	CL	CD	L/D	CM	CAC	CAB	CDC	CDB	ALPHA, DEG
M= 1.60, RE/M= 6.6 MILLION											
-4.25	-.1736	.0135	-.1721	.0264	-6.5304	-.0101	.0113	.0081	.0113	.0081	-4.25
-2.24	-.0787	.0140	-.0781	.0171	-4.5692	-.0017	.0112	.0081	.0112	.0081	-2.24
-1.19	-.0294	.0144	-.0291	.0150	-1.9448	.0028	.0113	.0081	.0113	.0081	-1.19
-.20	.0163	.0147	.0163	.0147	1.1143	.0073	.0113	.0081	.0113	.0081	-.20
.81	.0631	.0151	.0629	.0160	3.9279	.0116	.0113	.0081	.0113	.0081	.81
1.77	.1065	.0149	.1060	.0182	5.8128	.0157	.0114	.0082	.0114	.0082	1.77
3.85	.2041	.0154	.2026	.0291	6.9552	.0247	.0114	.0083	.0114	.0082	3.85
5.78	.2933	.0164	.2902	.0459	6.3289	.0325	.0115	.0063	.0115	.0083	5.78
6.80	.3401	.0169	.3357	.0570	5.8882	.0365	.0116	.0084	.0115	.0083	6.80
7.83	.3864	.0174	.3804	.0699	5.4424	.0402	.0116	.0084	.0115	.0083	7.83
8.78	.4294	.0180	.4217	.0834	5.0587	.0437	.0118	.0084	.0117	.0063	8.78
M= 1.62, RE/M= 6.6 MILLION											
-4.22	-.1696	.0131	-.1682	.0255	-6.5951	-.0099	.0112	.0081	.0112	.0081	-4.22
-2.22	-.0762	.0136	-.0756	.0166	-4.5672	-.0016	.0111	.0081	.0111	.0081	-2.22
-1.20	-.0277	.0139	-.0274	.0145	-1.8915	.0029	.0112	.0081	.0112	.0081	-1.20
-.20	.0176	.0144	.0176	.0143	1.2338	.0073	.0111	.0061	.0111	.0081	-.20
.78	.0625	.0149	.0623	.0158	3.9434	.0115	.0111	.0081	.0111	.0081	.78
1.80	.1082	.0150	.1077	.0184	5.8657	.0158	.0111	.0081	.0111	.0081	1.80
3.79	.2005	.0155	.1990	.0287	6.9411	.0242	.0112	.0081	.0112	.0081	3.79
5.79	.2920	.0165	.2888	.0458	6.3033	.0322	.0113	.0082	.0112	.0081	5.79
6.80	.3391	.0170	.3347	.0571	5.8640	.0362	.0113	.0082	.0113	.0081	6.80
7.82	.3840	.0175	.3780	.0696	5.4336	.0399	.0114	.0082	.0113	.0081	7.82
8.79	.4274	.0181	.4196	.0832	5.0440	.0433	.0116	.0082	.0114	.0081	8.79
M= 1.70, RE/M= 6.6 MILLION											
-.18	.0200	.0141	.0201	.0140	1.4328	.0068	.0106	.0076	.0106	.0075	-.18
1.83	.1086	.0144	.1081	.0179	6.0430	.0150	.0106	.0076	.0106	.0076	1.83
3.84	.1967	.0152	.1952	.0283	6.8903	.0229	.0107	.0077	.0106	.0077	3.84
5.84	.2844	.0161	.2813	.0449	6.2590	.0305	.0107	.0078	.0106	.0078	5.84

TABLE CI.- Concluded

ALPHA, DEG	CN	CA	CL	CD	L/D	CM	CAC	CAB	CDC	CDB	ALPHA, DEG
M= 1.86, RE/M= 6.6 MILLION											
-3.94	-.1385	.0127	-.1373	.0222	-6.1971	-.0082	.0099	.0070	.0099	.0069	-3.94
-1.99	-.0580	.0125	-.0576	.0145	-3.9603	-.0015	.0099	.0070	.0099	.0069	-1.99
-.98	-.0146	.0129	-.0144	.0131	-1.0990	.0024	.0099	.0070	.0099	.0069	-.98
.06	.0299	.0134	.0298	.0134	2.2240	.0066	.0099	.0070	.0099	.0069	.06
1.05	.0711	.0138	.0709	.0151	4.6916	.0104	.0099	.0070	.0099	.0069	1.05
2.06	.1118	.0141	.1112	.0181	6.1505	.0140	.0099	.0070	.0099	.0069	2.06
4.05	.1945	.0151	.1930	.0288	6.7060	.0212	.0099	.0070	.0099	.0069	4.05
6.05	.2727	.0161	.2715	.0449	6.0443	.0282	.0098	.0070	.0098	.0069	6.05
M= 2.00, RE/M= 6.6 MILLION											
-4.28	-.1433	.0123	-.1420	.0230	-6.1813	-.0091	.0093	.0063	.0093	.0062	-4.28
-2.28	-.0652	.0125	-.0647	.0151	-4.2915	-.0023	.0093	.0063	.0093	.0062	-2.28
-1.29	-.0271	.0125	-.0268	.0131	-2.0446	.0012	.0093	.0063	.0093	.0062	-1.29
-.29	.0119	.0128	.0120	.0128	.9389	.0048	.0092	.0063	.0092	.0062	-.29
.71	.0529	.0133	.0527	.0140	3.7664	.0083	.0093	.0063	.0093	.0062	.71
1.70	.0901	.0138	.0896	.0164	5.4562	.0118	.0093	.0063	.0093	.0062	1.70
3.72	.1676	.0146	.1663	.0255	6.5278	.0186	.0092	.0063	.0092	.0062	3.72
5.69	.2427	.0157	.2400	.0397	6.0509	.0251	.0091	.0063	.0091	.0062	5.69
M= 1.62, RE/M= 13.1 MILLION											
-.21	.0183	.0158	.0184	.0157	1.1693	.0075	.0095	.0081	.0095	.0081	-.21
1.85	.1132	.0163	.1126	.0200	5.6386	.0161	.0095	.0081	.0095	.0081	1.85
3.84	.2042	.0170	.2026	.0307	6.6070	.0247	.0096	.0081	.0096	.0081	3.84
5.83	.2943	.0180	.2910	.0478	6.0833	.0329	.0097	.0082	.0097	.0081	5.83

TABLE CII.- FLAT-WING FORCE AND MOMENT DATA WITH FIXED TRANSITION

ALPHA, DEG	CN	CA	CL	CD	L/D	CM	CAC	QAB	CDC	CDB	ALPHA, DEG
M= 1.60, RE/M= 6.6 MILLION											
-1.18	.0166	.0186	.0167	.0186	.8995	.0072	.0080	.0081	.0080	.0081	-1.18
1.77	.1065	.0183	.1059	.0216	4.9049	.0157	.0082	.0082	.0082	.0082	1.77
3.79	.1999	.0187	.1982	.0318	6.2249	.0244	.0082	.0083	.0082	.0082	3.79
5.80	.2936	.0196	.2901	.0492	5.8943	.0327	.0084	.0083	.0083	.0083	5.80
M= 1.62, RE/M= 6.6 MILLION											
-1.22	-.0306	.0185	-.0302	.0191	-1.5790	.0027	.0078	.0081	.0078	.0081	-1.22
-.23	.0152	.0185	.0153	.0184	.8312	.0070	.0078	.0081	.0078	.0081	-.23
.79	.0629	.0185	.0627	.0194	3.2375	.0114	.0079	.0081	.0079	.0081	.79
1.78	.1073	.0182	.1067	.0216	4.9489	.0157	.0080	.0081	.0080	.0081	1.78
3.77	.1992	.0187	.1976	.0318	6.2146	.0241	.0080	.0081	.0080	.0081	3.77
5.78	.2913	.0197	.2878	.0490	5.8750	.0323	.0081	.0082	.0081	.0081	5.78
6.78	.3364	.0202	.3317	.0598	5.5468	.0361	.0082	.0082	.0082	.0081	6.78
8.81	.4276	.0213	.4193	.0865	4.8446	.0436	.0085	.0082	.0084	.0081	8.81
M= 1.70, RE/M= 6.6 MILLION											
-1.18	.0185	.0182	.0186	.0181	1.0263	.0065	.0073	.0076	.0073	.0075	-1.18
1.83	.1077	.0179	.1071	.0214	5.0127	.0148	.0075	.0076	.0075	.0076	1.83
3.81	.1949	.0185	.1933	.0314	6.1540	.0228	.0075	.0077	.0075	.0077	3.81
5.84	.2840	.0195	.2805	.0483	5.8107	.0305	.0076	.0078	.0075	.0078	5.84
M= 1.86, RE/M= 6.6 MILLION											
-1.19	.0194	.0171	.0195	.0170	1.1423	.0057	.0063	.0070	.0063	.0069	-1.19
1.81	.1034	.0173	.1028	.0206	4.9927	.0133	.0065	.0070	.0065	.0069	1.81
3.80	.1852	.0183	.1836	.0306	6.0079	.0206	.0066	.0070	.0066	.0069	3.80
5.80	.2665	.0193	.2632	.0462	5.7004	.0278	.0066	.0070	.0066	.0069	5.80
M= 2.00, RE/M= 6.6 MILLION											
-1.30	.0069	.0168	.0070	.0168	.4161	.0040	.0058	.0063	.0058	.0062	-1.30
1.72	.0874	.0172	.0868	.0198	4.3762	.0110	.0059	.0063	.0059	.0062	1.72
3.71	.1640	.0181	.1625	.0287	5.6702	.0177	.0060	.0063	.0060	.0062	3.71
5.71	.2409	.0190	.2378	.0428	5.5528	.0244	.0060	.0063	.0060	.0062	5.71

TABLE CIII.- CAMBERED-WING FORCE AND MOMENT DATA WITH FIXED TRANSITION

ALPHA, DEG	CN	CA	CL	CD	L/D	CM	CAC	CAB	CDC	CDB	ALPHA, DEG
M= 1.60, RE/M= 6.6 MILLION											
5.88	.1851	.0144	.1827	.0332	5.4947	.0219	.0090	.0074	.0089	.0073	5.88
7.90	.2806	.0083	.2768	.0468	5.9204	.0308	.0090	.0074	.0090	.0073	7.90
8.91	.3289	.0051	.3242	.0560	5.7882	.0352	.0091	.0074	.0090	.0073	8.91
9.91	.3765	.0021	.3706	.0669	5.5408	.0395	.0091	.0074	.0090	.0073	9.91
10.89	.4236	-.0008	.4161	.0792	5.2501	.0437	.0091	.0074	.0090	.0073	10.89
11.93	.4734	-.0036	.4639	.0943	4.9182	.0481	.0092	.0074	.0090	.0072	11.93
M= 1.62, RE/M= 6.6 MILLION											
-4.09	-.2736	.0413	-.2700	.0607	-4.4476	-.0180	.0090	.0072	.0090	.0072	-4.09
-2.03	-.1834	.0364	-.1819	.0429	-4.2376	-.0109	.0089	.0072	.0088	.0072	-2.03
-1.12	-.1434	.0341	-.1427	.0369	-3.8672	-.0077	.0089	.0072	.0089	.0072	-1.12
-.13	-.0978	.0315	-.0978	.0318	-3.0776	-.0039	.0090	.0072	.0090	.0072	-.13
.92	-.0466	.0287	-.0471	.0280	-1.6826	.0005	.0091	.0072	.0091	.0072	.92
1.91	-.0018	.0257	-.0027	.0257	-.1055	.0041	.0090	.0072	.0090	.0072	1.91
3.90	.0942	.0202	.0926	.0266	3.4827	.0131	.0089	.0072	.0088	.0072	3.90
4.91	.1407	.0175	.1387	.0294	4.7124	.0174	.0088	.0072	.0088	.0072	4.91
5.92	.1871	.0146	.1846	.0339	5.4503	.0217	.0088	.0072	.0088	.0072	5.92
7.93	.2813	.0087	.2774	.0474	5.8473	.0304	.0089	.0073	.0088	.0072	7.93
8.93	.3284	.0056	.3235	.0565	5.7224	.0347	.0089	.0073	.0088	.0072	8.93
9.40	.3504	.0042	.3451	.0614	5.6191	.0367	.0089	.0073	.0088	.0072	9.40
9.91	.3748	.0027	.3688	.0672	5.4917	.0389	.0089	.0073	.0088	.0072	9.91
10.91	.4225	-.0003	.4149	.0797	5.2080	.0431	.0090	.0074	.0088	.0072	10.91
11.97	.4726	-.0033	.4630	.0948	4.8352	.0475	.0090	.0074	.0088	.0072	11.97
M= 1.66, RE/M= 6.6 MILLION											
7.91	.2753	.0092	.2714	.0470	5.7802	.0293	.0085	.0069	.0084	.0068	7.91
8.92	.3222	.0063	.3173	.0562	5.6485	.0335	.0086	.0069	.0085	.0068	8.92
9.93	.3693	.0034	.3632	.0670	5.4180	.0377	.0086	.0069	.0085	.0068	9.93
10.93	.4162	.0006	.4085	.0795	5.1409	.0418	.0086	.0070	.0085	.0068	10.93
11.94	.4631	-.0021	.4535	.0937	4.8383	.0459	.0087	.0070	.0085	.0068	11.94

TABLE CIII.- Concluded

ALPHA, DEG	CN	CA	CL	CD	L/D	CM	CAC	CAB	CDC	CDB	ALPHA, DEG
M= 1.70, RE/M= 6.6 MILLION											
5.93	.1813	.0148	.1788	.0334	5.3485	.0200	.0083	.0066	.0082	.0066	5.93
7.93	.2707	.0094	.2668	.0467	5.7166	.0262	.0083	.0066	.0082	.0066	7.93
8.94	.3171	.0067	.3122	.0559	5.5873	.0323	.0083	.0067	.0082	.0066	8.94
9.93	.3622	.0040	.3561	.0664	5.3609	.0363	.0083	.0067	.0082	.0066	9.93
10.92	.4070	.0014	.3993	.0784	5.0918	.0402	.0083	.0068	.0082	.0066	10.92
11.93	.4529	-.0012	.4434	.0924	4.7986	.0441	.0084	.0068	.0082	.0067	11.93
M= 1.86, RE/M= 6.6 MILLION											
7.88	.2505	.0111	.2466	.0454	5.4344	.0251	.0074	.0060	.0073	.0059	7.88
8.90	.2936	.0088	.2887	.0541	5.3351	.0289	.0074	.0059	.0073	.0059	8.90
9.92	.3371	.0064	.3309	.0644	5.1393	.0327	.0073	.0059	.0072	.0058	9.92
10.90	.3785	.0043	.3708	.0758	4.8949	.0363	.0074	.0059	.0072	.0058	10.90
11.89	.4210	.0022	.4115	.0889	4.6286	.0399	.0074	.0059	.0073	.0057	11.89
M= 2.00, RE/M= 6.6 MILLION											
7.81	.2268	.0127	.2230	.0434	5.1424	.0215	.0068	.0053	.0067	.0053	7.81
8.83	.2674	.0107	.2626	.0516	5.0901	.0251	.0068	.0053	.0067	.0052	8.83
9.79	.3064	.0088	.3005	.0608	4.9451	.0286	.0068	.0053	.0067	.0052	9.79
10.81	.3474	.0068	.3399	.0719	4.7312	.0321	.0068	.0053	.0067	.0052	10.81
11.81	.3889	.0050	.3796	.0845	4.4924	.0357	.0069	.0053	.0067	.0052	11.81

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16. Abstract A wing-body-canard configuration was tested at a Mach number of 1.62 by using both a cambered and an uncambered wing. The cambered wing was designed to produce efficient high lift by using attached supercritical crossflow and was originally tested as an isolated wing. The uncambered wing had the same planform and essentially the same thickness distribution as the cambered wing. The present experiment determined the effects of a body and canards on both wings. The experimental data showed that both the body and the canards influenced the wing pressure levels, but that the attached supercritical crossflow, which was achieved in the isolated cambered-wing test, was maintained in the presence of a body and canards. Tables of experimental pressure, force, and moment data are included, as well as photographs of oil-flow patterns on the upper surface.				13. Type of Report and Period Covered Technical Paper	
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